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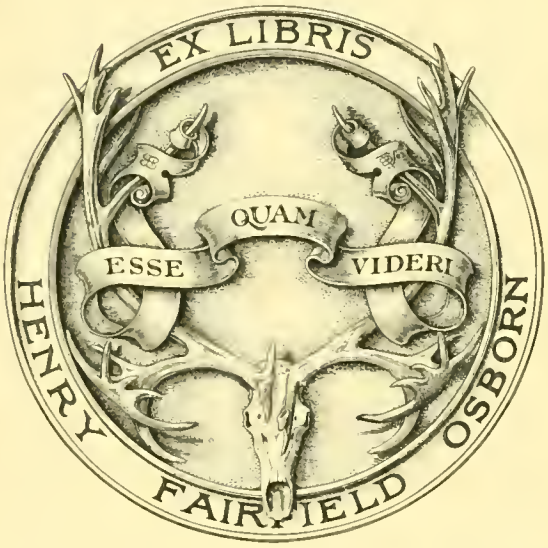

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THE MAMMALS OF SOMALILAND

LESSER KUDU

THE MAMMALS OF SOMALILAND

BY

R. E. DRAKE-BROCKMAN

F.Z.S., F.R.G.S., Etc.

COLONIAL SERVICE

WITH EIGHTEEN COLLOTYPE PLATES

AND DIAGRAMS

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To

MY MOTHER

PREFACE

THIS work is the result of five years' study of the Fauna of Somaliland, made while residing in the Somali country. That it may be of some interest to naturalists, and of use to the sportsman, is the earnest hope and ultimate desire of the author.

The Somali country has long been renowned for its peculiar and beautiful Fauna, which, owing to the warlike nature of its inhabitants, has been but slightly studied.

There are still immense areas in the "Horn of Africa" unexplored by the white man which in all probability contain many interesting birds and mammals as yet unknown.

My endeavour throughout has been to state as concisely as possible all that is known regarding the mammals of the vast region called Somaliland, and to show how slight our knowledge is concerning them.

It is impossible for me to thank individually all those who have from time to time assisted me in one way or another; but I cannot close without one word of praise for one, Abdullah Warsama, H.G., Aidagalleh, Guyube, my orderly, who during the past five years has not only assisted me in obtaining most of my specimens, but has been responsible for the preparation of many of them. His knowledge and his intelligent interest in the habits and the peculiarities of the wild beasts of his country have been of the greatest help to me.

My best thanks are due to the Secretary of State for the

Colonies for permitting me to reproduce in full the Ordinance relating to the Game in the Somaliland Protectorate; to the Trustees of the British Museum of Natural History for their *Hints on Removing and Preparing Skins of Mammals*; to Mr. Oldfield Thomas for many hints and suggestions; to Mr. H. A. Byatt for allowing me to make use of his photograph of the Dibatag; and to Captain Walford of the Suffolk Regiment for the use of some of his notes.

R. E. D.-B.

BERBERA,
BRITISH SOMALILAND.

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ORDER—PRIMATES

SUB-ORDER—ANTHROPOIDÆ

FAMILY—CERCOPITHECIDÆ

GENUS—CERCOPITHECUS

C. æthiops

GENUS—PAPIO

P. hamadryas

ERRATA

Pages 3 and 4, line 3, for "Diyar" read "Dayer."
Page 17, line 26, for "Johnson-Stewart" read "Johnston-Stewart."
,, 21 ,, 10, read "male shot on Guban by Capt. Jorgensen."
,, 49 ,, 34, for "neck" read "side."
,, 74 ,, 13, for "the Webi, Shebeleh" read "the Webi Shebeleh."
,, 83, Plate, for "Clark's gazelle" read "Clarke's gazelle."
,, 92, line 10, for "Arreh" read "Godir arreh."
,, 95 ,, 3, for "Godir, Arreh" read "Godir arreh."
,, 194 ,, 15, for "sœmmering" read "sœmmeringi."

ORDER—PRIMATES

SUB-ORDER—ANTHROPOIDÆ

FAMILY—CERCOPITHECIDÆ

GENUS—CERCOPITHECUS

C. æthiops

GENUS—PAPIO

P. hamadryas

GRIVET MONKEY

Cercopithecus æthiops, Linn.

Galla, *Wenni*; Somali name, *Diyai*

DESCRIPTION.—General colour greenish brown, imparted to the fur owing to each hair being banded alternately black and yellow. Underfur grey. Fur on throat, cheeks, supra-orbital ridges, chest, belly, inner side of arms and legs, white. Tail grey above, white below. Tip of tail grey or whitish.

MEASUREMENTS.—A medium-sized grivet. I was unable to take the measurements of my specimen shot on the Webi.

DISTRIBUTION.—The banks of the Juba, Webi Shebeleh, and their affluents.

HABITS.—This monkey is quite common on the affluents of the Juba, especially the River Webi. It goes about in troops, and does great damage to the small plantations of the Wagosha, Gurre, and other tribes who inhabit the banks of the Somali rivers.

THE DOG-FACED OR ROCK BABOON

Papio hamadryas, Linn.

Somali name, *Diyar*

DESCRIPTION.—This hideous beast is of a uniform grey colour when fully grown, but when young is brown. The females retain this brown colour till much later in life than the males. The latter in adult life and old age develop a heavy mane, which assists them in looking more formidable when they adopt a threatening attitude. The hairs of the cheeks and parts of the mane as age advances get silver-grey in colour.

MEASUREMENTS of an old male in the flesh were:

Head and body	737 mm.
Tail	562 „
Sole of foot	188 „
Ear	57 „
Length of hair of mane	245 „
Weight	43 lb.

DISTRIBUTION.—Found throughout Northern Somaliland in suitable localities.

HABITS.—The rock baboon is always found in troops of fifty to one hundred or more individuals. As the name signifies, they are always in the neighbourhood of cliffs and rocky ridges, where they can rest at night safe from the larger Carnivoræ. On the approach of danger the females gather up their young and move along at a rare pace. The males usually lag behind, frequently turning round and standing in a menacing attitude, giving vent the while to grunts and deep-throated sounds. They have been said to attack human beings; but I have always found them only too anxious to make good their escape. They are greatly preyed upon by leopards; but beyond making the most hideous screams they do not make any attempt at rescuing one of their number if one unluckily gets caught. They live entirely on wild fruits and roots, and usually come down to drink about midday.

SUB-ORDER—LEMUROIDÆ

FAMILY—LEMURIDÆ

GENUS—GALAGO

G. gallarum

THE SOMALI LEMUR

Galago gallarum, Thos.

Somali name, unknown ; Galla, *Kulo adadi*

DESCRIPTION.—The general colour of this animal is grey, the basal part of the fur dark slaty. The chin and throat are white, abdomen and remaining underparts creamy white except on the thighs and elbows, where the fur is a pale ochraceous, probably owing to its living in the red-earth country. The fur is very soft and thick. On the hands and feet the hair is silky white. The ears are large, hairless inside, and only sparsely covered outside. The tail is very long and bushy towards its terminal part. The hairs of the tail are silky white mixed with dark smoky black, giving a general grey appearance, which is darker towards the terminal half. Their length towards the tip of tail varies from 30–35 mm. The second toe is peculiar in being furnished with a minute claw instead of a flat nail like the other toes and fingers.

MEASUREMENTS in the flesh of adult male and female lemurs shot at Odweina :

	♂	♀
Head and body	196 mm.	171 mm.
Tail	254 „	245 „
Hindfoot	38 „	32 „
Ear	38 „	32 „

DISTRIBUTION.—The above specimens were killed at Odweina, about 100 miles south of Berbera, and I have seen it at Hargeisa and on the Juba River, where it is quite common.

HABITS.—Although frequently seen on the ground, jumping along on its hindlegs like a jerboa, it is chiefly arboreal in its

habits. It appears to spend the day in holes in trees, emerging about sunset to feed. Its food consists of the seeds of the "gurha" tree, insects, and probably the fruit of the "gob" tree. It is always found living in the tall acacia trees ("gurha" and "wadi") so common along the large riverbeds, such as are seen at Odweina and Hargeisa. They also probably eat the grape-like fruit of the "Armo" creeper. I chased one of these lemurs one evening at Hargeisa. It was feeding on the ground, and, as soon as it sighted me, started jumping towards me, when suddenly, taking a leap, it seized the hanging branch of an acacia, about three or four feet from the ground, and disappeared, as if by magic, among its branches. I carefully searched the tree with my gun-bearer for about a quarter of an hour, but we never detected its whereabouts. The tree was not more than fifteen to twenty feet in height, and it had no holes in its trunk or branches. They must be adepts at the art of concealing themselves.

They probably live on insects in the dry weather, for at certain seasons there is no fruit on the "gob" trees. At Odweina, practically the only trees along the river bed are the huge "gurha" and "gob" trees, so there, at any rate, they must subsist for months on insects alone. They are seen singly or in pairs, usually the latter. They breed in March, just before the rains. Soon after sundown they may be seen jumping from branch to branch with lightning-like rapidity. A curious fact about this lemur is its fondness for a particular tree. After one pair had been shot in a certain tree at Odweina, another pair came and took up their abode in the same tree and bred there. Why they selected this particular tree it is difficult to say. Another peculiarity I have noticed is that when the female is suckling its young, the male is always conspicuous by its absence.

ORDER—CARNIVORA

SUB-ORDER—FISSIPEDIA

DIVISION—ÆLUROIDEA

FAMILY—FELIDÆ

GENUS—FELIS

F. leo
F. pardus
F. pardus nanopardus
F. serval
F. ocreata
F. caracal

GENUS—CYNÆLURUS

C. jubatus

THE LION

Felis leo, Linn.

Somali name, *Libah* or *Libbah*

DESCRIPTION.—The general colour of the lion is tawny yellow. In the male there is a more or less distinct mane which may be either tawny yellow, a mixture of tawny yellow and black, or black. The female is maneless. The young cubs and very often the adult animals have spots of the general body colour on the sides and underneath. The tail is furnished with a black tip. The head and jaws are very massive, and it is remarkable to what extent a lion can open his jaws—it is no uncommon sight to see a shikari place his whole head inside a lion's mouth when it has been killed.

MEASUREMENTS in the flesh of an adult male and female shot in the Haud by Captain Walford were :

	♂	♀
Length (straight between two pegs at nose and tip of tail) . .	8 ft. 9 in.	7 ft. 5 in.
Height at shoulders . . .	3 „ 4 „	3 „ 0 „
Girth of forearm	1 „ 4 „	1 „ 0 „

DISTRIBUTION.—The lion used to be found all over Somaliland, but is now seldom seen far distant from the Haud, Nogal Valley, and Ogaden, where he is still plentiful. Lions are rare in British Somaliland, comparatively speaking. They still, however, are known to wander on to the Golis Range and to within 20 miles of Bulhar.

HABITS.—Lions are almost entirely nocturnal in their habits. They are as often seen in numbers as singly. Unless very hungry they usually leave their "kill" an hour or so before dawn and make

for some suitable shady cover, in which they lie throughout the heat of the day. It is usually difficult to dislodge them from their lair, without either setting a light to it or partially surrounding it with howling natives. In Somaliland it is customary to either sit up over a "kill" or follow up the tracks and attempt to drive the lion from his midday retreat. To accomplish the latter it is necessary to have six or eight mounted Somalis who ride with uplifted spear through the thick cover, usually driving the lion in front of them towards the spot where the sportsman is standing, when an easy shot is generally obtainable, as the brute stands hesitating at the edge of the bush, wondering which way to dash off. Very frequently only a snapshot at him is obtainable when he bounds out of the cover, but the horsemen soon round him up again and eventually bring him to bay.

To my thinking, the lion's roar is not as grand as it is made out to be. On a still night the deep growls are heard a long way off, and as they approach nearer and nearer the excitement grows more intense and one is apt to exaggerate the noise. The so-called roar is a series of well-timed deep throaty growls ending in a hiss, as the volume of air leaves the lips. These growls, or rather series of growls, are heard at varying intervals as the lion is wandering about. It is difficult to imagine that an animal so cunning can give vent to these far-sounding noises when hungry and in quest of food, as the terrified animals must take good care to place themselves at a safe distance from their dreaded antagonist. In Somaliland lions chiefly rely on the wandering karias * for their food supply. At night they leap the high zarebas, carrying off sheep and goats, or lie up for the unwary camel as it feeds in the tall "durr" grass in the daytime. They frequently travel long distances at night to deliver an attack at some unsuspecting karia many miles away from where they were last heard.

I have known an old lion literally play with a donkey tied up for his benefit. This occurred a few years ago while I was shooting on the edge of the Nogal Valley. A very fine lion which I had failed for three nights to entice within range and which appeared to be extraordinarily cunning, I determined to present with a donkey for him to kill and gorge at his leisure,

* A collection of huts belonging to one or more families, together with their cattle, camels and small stock.

so that I might the more easily follow him up the next day. I tied up my donkey about two hundred yards from my own zareba, so imagine my surprise when I was awakened in the middle of the night by my servant shouting "Libah, libah!" A great rushing noise followed by a cloud of dust close to me made me jump to my feet, only to find my old friend the donkey standing close up against the zareba with a small uprooted tree by his side.

Next morning, on examining the spot where the donkey had been tied, we found innumerable lion pugmarks all round where the unfortunate donkey had been tied. In his frantic efforts to save himself the donkey had eventually succeeded in uprooting the small tree to which he was tied, and without a moment's hesitation made a straight line for camp, dragging the tree, and followed for a short way by the lion. The lion hadn't merely come up and walked round the donkey; marks were visible where he had sat down within a few yards of him and wisked the sand with his tail, in his pleasure at the toothsome morsel so close within his grasp.

THE LEOPARD

Felis pardus, Linn.

Somali name, *Shebel* or *Shebeyl*

DESCRIPTION.—The general or ground colour of tawny yellow somewhat varies—depending on the fact whether the specimen comes from Guban or the Golis Range, the latter being somewhat darker in colour while the fur is rather thicker. The whole body is covered with black spots and black rings, the latter being chiefly on the back and sides. Underneath, the colour fades to white. The tail, which is long, is of the general body colour and ringed with black, and furnished at the extreme end with a white tip. The ears posteriorly are black at the bases.

MEASUREMENTS in the flesh of two females, one specimen from Guban, the other from the Golis Range, and a male specimen from the Golis were as follows:

	Hill variety. ♀	Plain variety. ♀	Hill variety. ♂
Length of head and body .	39½ in.	41½ in.	48 in.
„ „ tail . . .	29 „	28½ „	31 „
Height at shoulder . .	26 „	22 „	26½ „
Round chest . . .	22½ „	19 „	24¾ „
Weight	not taken	not taken	77 lb.

From the above measurements it will be seen that both the specimens shot on the Golis Range stand higher at the shoulder and have a greater chest measurement. The largest specimen seen and measured by me, unfortunately after it had been skinned, was shot near Hargeisa by Mr. Thompson. This skin measured 8 ft. 8 in., and from its general appearance did not appear to be

unduly stretched—so, allowing six inches for the stretching, this magnificent leopard must have been over 8 ft. in length. This, as far as I am aware, is a record for an African specimen.

DISTRIBUTION.—Leopards are plentiful throughout Somaliland.

HABITS.—Nocturnal in its habits, it is rarely seen during the day, which it spends in caves, hollowed out of the limestone cliffs and hills. It is more abundant in hilly country than in the bush, finding safe retreats in the former. Its chief food consists of sheep and goats, and when these are unobtainable, baboons and the smaller mammals. It frequently attacks the herds while they are grazing on the hillsides in the daytime, rapidly killing several before being driven off by the shrieks of the children in charge. They sometimes clear thorny zarebas six feet or more in height, with their victim in their jaws. One moonlit night I was startled by a struggle within six feet of me, and I was just in time to see a leopard leaving the zareba, in which I had bivouacked for the night, with one bound bearing one of my sheep in its mouth. The leap was well over six feet. On another occasion I was aroused by yelling at night, and on going up to the karia whence the noise came, I was shown a thorn enclosure completely covered over, forming it into a hut, through the top and sides of which one could just distinguish the white coats of the sheep and goats within. I was shown a small opening in the roof about eight feet from the ground, through which a leopard had entered and retreated, carrying away one of the sheep. The Somalis say that the leopard first leaps on top of one of these enclosures, and then ascertains where there is a small opening by letting his tail down through the thorn branches, and as soon as he finds his tail enters easily, he turns round and forces his way inside, seizes his victim, and dives out through the same opening.

The rapidity of their movements is marvellous—in an incredibly short space of time they will lay out half a dozen sheep and, seizing one, make off. If a leopard kills during the daytime and is driven off, it invariably returns an hour or two before sundown to the scene, in the hope of finding something left. If four or more animals are killed at one time and left where they were killed, the leopard will return night after night until the meat is finished, hiding what it was unable to eat up the nearest tree, out of the

reach of jackals and hyænas. I have seen as many as three whole sheep up a tree.

Leopards occasionally become man-eaters—this propensity I should say is hereditary, as I have only known of man-eating leopards in one locality, and that is a place called Daraas, on the Golis Range. Near this place there are a number of Somali graves, the occupants of which have all been killed by leopards—probably a single leopard. This leopard was fortunately shot, but about two and a half years afterwards another started man-eating in exactly the same locality. The Somalis have a name for the man-eating leopard, which they consider a different animal from the ordinary cattle thief. The man-eater is known by the name "Urgobeh." Leopards, even when wounded, invariably try to get away, and I have never known them to attack a human being unless brought to bay. I on[s]e occasion saw an old woman, whose sheep a leopard had killed, approach the leopard, which had been wounded and was trying to slink away, and throw stones at it, while the leopard merely snarled at her. On another occasion I shot a leopard up a tree where it had been driven by a crowd of Somalis, who had chased it with spears and wounded it in the shoulder. The Somali has little or no fear of the leopard.

THE PIGMY LEOPARD

Felis pardus nanopardus, Thos.

Somali name, *Shebel* or *Shebeyl*

DESCRIPTION.—Never having seen this small leopard, which apparently only inhabits the Southern Haud, I will quote from the "Annals and Magazine of Natural History," ser. 7, vol. xiv., August 1904, in which it was first described by Mr. Thomas from specimens obtained by Major Dunn, R.A.M.C.: "A leopard of the ordinary African desert type, but conspicuously smaller than any other member of the group. Fur short, hairs of back only about 10 mm. in length. Coloration as usual in East African leopards, the general tone pale, the ground-colour along the dorsal area pale buffy or creamy-buffy, gradually passing into white on the belly and limbs. Spots small, more or less elongated on the anterior back; rosettes not well defined or conspicuous. Spotting on limbs extending to the toes. Teeth as usual except for their smaller size."

MEASUREMENTS of stretched skins of a male and female were as follows:

	♂	♀
Length of head and body	1150 mm. or 3 ft. 9 in.	1070 mm. or 3 ft. 6 in.
Length of tail	650 „ „ 2 „ 1½ „	580 „ „ 1 „ 11 „
Total length	1800 „ „ 5 „ 10½ „	1650 „ „ 5 „ 5 „

DISTRIBUTION.—The pigmy leopard (of which up to date only three specimens have been obtained, while one of these, namely Captain Johnson-Stewart's, was lost), as far as is at present known, is found only in the Nogal Valley and the Ogaden country. Dunn obtained both his two specimens 40 miles west of Gorahai on the Tug Fafan.

HABITS.—Nothing is as yet known of the habits of this leopard, but they are probably very similar to those of other leopards. Once on the edge of the Nogal Valley, while making my way through thick bush, I came upon a small leopard sleeping under a tree. I had no rifle at the time, so was unable to shoot it, but at the time, although smaller than any leopards I had seen, it gave me the idea of being a full-grown animal, and very possibly it might have been this species.

Leopards are usually found in rocky country, while this animal was in the sandy, waterless bush country. Possibly the pigmy leopard inhabits country of this sort.

THE SERVAL

Felis serval, Erxleben.

Somali name, *Dinad habashi* or *Shebel adari*

DESCRIPTION.—The general colour of the serval varies from a tawny yellow to a bright yellowish brown above and creamy white below. It is covered with black spots except on the neck and back, where there are a series of longitudinal black stripes. The animal in appearance looks something like a small cheetah. The ears are similar to the cheetah's, having a black transverse band posteriorly.

MEASUREMENTS.—The measurements of a skin in the British Museum are:

Length of head and body	2 ft. 10 in.
Length of tail	1 „ 3 „

DISTRIBUTION.—As far as I have been able to ascertain, the serval is only found towards the west in the direction of Abyssinia, where there is a plentiful supply of tall "durr" grass for it to hide in during the heat of the day, and grassy plains for it to wander over by night.

As its Somali name signifies, it is known to the Somalis as the Abyssinian cat. I have never seen it myself in Somaliland, although Captain Cox obtained a specimen in Northern Somaliland. This specimen is now in the British Museum.

HABITS.—It lives entirely on small mammals and birds. It is nocturnal in its habits, spending the day sleeping in the long grass. It is very shy, and seldom seen by day unless hunted out of the grass by dogs. I have tried to tame the kittens, but with little success; but I have seen one or two become quite tame.

THE WILD CAT

Felis ocreata, Gmel.

Somali name, *Dinad sabad*

DESCRIPTION.—This wild cat is not unlike our tabby cat in appearance, but is much paler. The general colour is grey, with more or less distinct spots and stripes about it. The underfur is ochraceous.

MEASUREMENTS of a male specimen in the flesh :

Length of head and body	23 in.
„ of tail	14½ „
Round body	10½ „
Height at shoulder	13 „

DISTRIBUTION.—I have never seen this cat on Guban, but doubtless it is to be found there. It is found on Ogo Guban and in Ogo, but is by no means common. I have seen it on three occasions at Odweina, 100 miles south of Berbera.

HABITS.—It is very shy, and spends the day hidden away in the dense undergrowth commonly found in the bush country which it invariably inhabits. It preys upon birds, hares, and small mammals, and doubtless occasionally on dik-diks. It is difficult to tame, even when taken young.

THE CARACAL OR LYNX

Felis caracal, Güld.

Somali name, *Gududonneh*

DESCRIPTION.—The general colour is reddish grey with some black-tipped hairs on the back, rendering it darker than the rest —the colour is paler on the sides, and is nearly white underneath with faint pinkish fawn-coloured spots. The ears are black with spangles of grey hairs, and furnished with a tuft of long black hairs at tip of each ear. The tail is of the general body colour.

MEASUREMENTS in the flesh of a male shot on Guban :

Head and body	36 in.
Tail	9 „
Height at shoulder	15 „

DISTRIBUTION.—The caracal is to be found throughout Somaliland, but is distinctly rare. I have only twice seen it alive—once in captivity at Berbera and once near the Arori plain. Several have, of late years, been trapped on Guban.

HABITS.—It is nocturnal in its habits, sleeping throughout the day in thick bush. It preys chiefly on birds and small mammals, and frequently attacks sheep and goats in the daytime. Dik-diks probably furnish their chief food supply.

THE CHEETAH OR HUNTING LEOPARD

Cynælurus jubatus, Elliot

Somali name, *Harimāt* or *Harimād*

DESCRIPTION.—The cheetah is easily distinguished from the leopard at a distance, owing to its long legs and lighter colouring. The general colour is dull yellow covered all over with small black spots, seldom exceeding in size a shilling piece except on the hindlegs, where they may be as large as a florin. The hair on the back of the neck and shoulders is coarser and thicker and resembles a mane—this mane or crest of long hair is very noticeable in the young. From the inner canthus of the eye to the mouth on each side is a distinct black band, and a similar transverse black band is found posteriorly at the bases of the ears, the tips of the latter being of the general body colour. The legs are long, and the feet furnished with only partially retractile claws. The general colour of the young is grey, with indistinct black markings but with a very noticeable woolly mane on the back and shoulders.

MEASUREMENTS in the flesh of a female shot in the Khansa bush country :

Head and body	3 ft. 4 in.
Length of tail	1 „ 11 „
Height at shoulder	2 „ 2 „
Round body	1 „ 9½ „
Weight	55 lb.

DISTRIBUTION.—The cheetah is commonest in the thick bush country on the edge of the Haud, although it is to be found both on Guban and Ogo-Guban.

HABITS.—The hunting leopard, although chiefly nocturnal, is frequently seen in the daytime. They are perhaps more often seen in pairs than singly—probably finding it easier to hunt together than alone. Their chief food consists of the small sand antelopes (dik-diks). I heard of a case of a cheetah on one occasion climbing a small tree, while being hunted by dogs on Guban, but I fancy this to be of rare occurrence, as they can with little exertion outstrip any dog. They never run very far without stopping to turn and gaze at their pursuers, whom they not infrequently allow to come to within fairly close quarters, when they gallop off again at a great pace.

They prefer to live in the low bush country, where they in all probability find it easier to procure their food. I once saw a pair devouring a dik-dik, and as soon as they had finished I went and examined the spot and found only a small piece of skin remaining. The very young cubs are rather difficult to rear, although with a little trouble they will suckle a goat—the milk, however, never seems to agree with them, and after some weeks they usually succumb to enteritis. Three or four cubs usually form a litter. When successfully reared they make delightful pets, and will follow their master just like a dog.

FAMILY—VIVERRIDÆ

GENUS—GENETTA

G. dongolensis

GENUS—HERPESTES

H. albicauda
H. ochraceus
H. ochraceus fulvidior
H. ochraceus perfulvidus

GENUS—HELOGALE

H. atkinsoni
H. hirtula

GENUS—CROSSARCHUS

C. somalicus

GENET

THE GENET

Genetta dongolensis, Hempr. and Ehr.

Somali name, *Dinaa*

DESCRIPTION.—General colour is grey, with well-marked brown spots, arranged more or less longitudinally. In the two uppermost rows on each side, the spots are so close together as to give the appearance of two brown lines. Along the middle line of the back is a crest of long black erectile hairs. The forelegs are grey, while the hindlegs are grey on their anterior surfaces and black posteriorly from a point just above the knees. The tail from base to tip consists of bands more or less equal in breadth, of black and white. Under the large round eyes is a small patch of white. Near the anus are two glands, from which a straw-coloured strong-smelling secretion is emitted. The Somalis have no special name for the genet.

MEASUREMENTS of a male specimen shot in Berbera were :

Head and body	. . . .	$17\frac{1}{8}$ in.	or 428 mm.
Tail	. . . . .	17 „	„ 425 „
Hindfoot	. . . . .	3 „	„ 75 „
Ear	. . . . .	2 „	„ 50 „
Round body	. . . . .	$6\frac{3}{4}$ „	„ 168 „
Height at shoulder	. . . .	$7\frac{3}{4}$ „	„ 193 „
Round neck	. . . . .	$4\frac{1}{4}$ „	„ 106 „
Length of neck	. . . . .	4 „	„ 100 „

DISTRIBUTION.—This genet is found throughout Northern Somaliland. It is perhaps commoner on the Golis Range than elsewhere.

HABITS.—It lives chiefly on small birds and animals, especially the former, but will steal meat when it gets the opportunity. It is entirely nocturnal in its habits, spending the day stretched out along the branch of some shady tree, such as the *Euphorbia candelabra* (" Hasaden "). It is a curse to the poultry yard, visiting it night after night until shot or trapped.

THE WHITE-TAILED MUNGOOSE

Herpestes albicauda, Thos.

Somali name, *Songur*

DESCRIPTION.—This is the largest of the Somali mungooses. The general body colour is grey; the underhair may be white or slaty grey; the long hairs are coarse and are banded black and white except along the back, where they are wholly black, giving the general body colour a darker appearance in that part. The four extremities from the elbows and knees respectively are jet black. The tail is of the general body colour except for its terminal half, which is pure white.

MEASUREMENTS. Of skins only:

(i) From Guban.

Head and body	21 in.
Tail	$17\frac{1}{4}$ „

(ii) From Golis Range.

Head and body	$24\frac{1}{2}$ in.
Tail	17 „
„ (with terminal hairs)	$21\frac{1}{2}$ „

DENTITION.—*i.* $\frac{3}{3}$, *c.* $= \frac{1}{1}$, *pm.* $\frac{3}{3}$, *m.* $\frac{3}{3} = 20$.

DISTRIBUTION.—This mungoose is found both on Guban and on the Golis Range; the specimens from the latter locality are usually larger and darker in colour.

HABITS.—It is seldom seen in the daytime, and seems to have a preference for stony country. In other respects it resembles the other members of its tribe in its habits.

THE YELLOW MUNGOOSE

Herpestes ochraceus, Gray

Somali name, *Sorgur*

DESCRIPTION.—This mungoose is tawny in colour with a slightly grizzled appearance, owing to the hairs on the back being banded black and yellow.

MEASUREMENTS in the flesh of a specimen obtained at Jifa Medir, near Hargeisa, are :

Head and body	269 mm.
Tail	273 „
Hindfoot	50 „
Ear	25 „

DISTRIBUTION.—The type specimen of this species is labelled "Abyssinia"; but nothing is known of the exact locality. The above specimen was obtained near Hargeisa, so it is probably found throughout Northern Somaliland, especially in the hilly regions in the Jibril Aboukr and Gadabursi countries.

HABITS.—It resembles in habits the others of the same group, and is only seen singly or in pairs. It is undoubtedly a rare mungoose.

THE TAWNY MUNGOOSE

Herpestes ochraceus fulvidior, Thos.

Somali name, *Sorgur*

DESCRIPTION.—The general body colour of this mungoose is grizzly ochraceous above and buffy white below. The tail is the same colour as the back, namely tawny, except for its terminal third, which is black.

MEASUREMENTS in the flesh of a female trapped at Shimbiraleh, in Guban, were as follows :

Head and body	267 mm.
Tail	245 „
Hindfoot	49 „
Ear	25 „

DISTRIBUTION.—This mungoose is rare. I have only met with it on Guban.

HABITS.—It inhabits thick bush along the watercourses on Guban. Although I have never seen it except on Guban, a specimen was obtained by C. V. A. Peel near Aik. The Somalis have given this and the following species the name "Sorgur" owing to their greedy habits. The word means "take away food." They assert that when a sheep dies, these mungooses will occupy holes near by until they have finished it.

THE RED MUNGOOSE

Herpestes ochraceus perfulvidus, Thos.

Somali name, *Sorgur*

DESCRIPTION.—This is the most beautiful of the Somali mungooses. The general body colour is bright ochraceous above and a creamy white below. The tail is of the general body colour, only more tawny with its terminal third jet black.

MEASUREMENTS in the flesh of a male and female specimen trapped at Ber, 17 miles east of Burao:

	♂	♀
Head and body	322 mm.	230 mm.
Tail	247 „	214 „
„ (with terminal hairs) . .	277 „	— „
Hindfoot	52 „	45 „
Ear	27 „	23 „

DISTRIBUTION.—All my specimens were caught at Ber, where they appear to be fairly common. I fancy they are to be found throughout the Haud and the red-earth country. I have seen them also near Odweina wells. Major Dunn, R.A.M.C., obtained a specimen near Wardair.

HABITS.—They are frequently seen during the heat of the day, when their bright fur is most conspicuous. They usually go about in pairs; but I have seen as many as four together. They are probably, as Mr. Thomas suggests, the representatives in the red-earth country of the Abyssinian *H. ochraceus*.

ATKINSON'S MUNGOOSE

Helogale atkinsoni, Thos.

Somali name, *Shug-shug*

DESCRIPTION.—The general colour of this mungoose is grizzled grey above and rufous below. The fur is somewhat long, coarse, and shaggy. Tail similar to general body colour.

MEASUREMENTS of a male specimen shot at Horo, about 50 miles south-west of Bulhar.

Head and body	230 mm.
Tail	170 „
Hindfoot	37 „
Ear	17 „

DISTRIBUTION.—Found among the Golis foothills and in the hilly country between Bulhar and Hargeisa. Major Dunn obtained a specimen in the Ogaden country.

HABITS.—I have always seen it in company with several others ; on one occasion there were at least twenty together—this was in the Sansieviera bush country. On being surprised they make a peculiar grating noise resembling *chic-churr-rr*, and they keep this up incessantly from among the bushes until the intruder takes his departure.

THE SHAGGY MUNGOOSE

Helogale hirtula, Thos.

DESCRIPTION.—This mungoose is very similar to *H. atkinsoni*, but differs from it in having the fur longer, coarser, and shaggier.

MEASUREMENTS from a specimen obtained by Major Dunn in the Ogaden country.

Head and body	230 mm.
Tail	166 „
Hindfoot	48 „
Ear	18 „

DISTRIBUTION.—The only specimen as yet known is the one obtained by Dunn at Gabridshari, 60 miles west of Gerlogobi Wells. From this specimen Mr. Thomas described the species as new.

HABITS.—The habits of this mungoose are not known. Personally I have never seen it.

THE BANDED MUNGOOSE

Crossarchus somalicus, Thos.

Somali name, *Shug-shug*

DESCRIPTION.—This is the commonest of the Somali mungooses. The general colour is grizzled brown or grey. The long hairs are so arranged on the back that the bands of black come together, thus giving it the banded appearance.

MEASUREMENTS in the flesh of an adult female shot at Sheikh were as follows :

Head and body	370 mm.
Tail	275 „
Hindfoot	80 „
Ear	25 „

DISTRIBUTION.—I have never seen this mungoose on the coast, nor within twenty miles of it. Starting at the Golis foothills about thirty-five miles from Berbera, it is found in suitable localities almost to the edge of the waterless Haud.

HABITS.—The Shug-shug, to give it its Somali name, is invariably seen in packs of anything from ten to a hundred individuals. They always appear to be in a hurry when searching for food, and look very like a swarm of small baboons as they go hopping along, digging here and there for roots, insects, and in fact most things, vegetable and animal, that might be considered edible. They leave their holes soon after sunrise and return before sunset, when they are frequently to be seen sitting warming themselves in the last rays of the sun. They are more commonly seen on or near the Golis Range than elsewhere, and seem to have a predilection for stony ground. They, as a rule, take up their abode in a "talo" or Galla grave, which consists of a large pile of stones, in the recesses between which they find a suitable habitation. An old "dundumo" or white-ant hill is another favourite dwelling-place of theirs. They will sometimes turn on a dog if he molests them, but as a rule they get away as fast as they can. They emit a powerful and disagreeable odour.

FAMILY—PROTELIDÆ

GENUS—PROTELES

P. cristatus

FAMILY—HYÆNIDÆ

GENUS—HYÆNA

H. hyæna
H. crocuta

AARDWOLF

THE AARDWOLF

Proteles cristatus, Sparrm.

Somali name, *Shambel*

DESCRIPTION.—The aardwolf looks not unlike a small striped hyæna, and is about the size of the common jackal. The general colour is a pale buff, and the hair soft and fine. Along the back, running the whole length of the body, is a crest of long erectile hairs which are continued on to the tail, which is short and bushy. These hairs are thickest on the nape of the neck, and run up to 170 mm. in length. They are of a pale buff colour, banded with black. The neck is rather long, and is of a uniform buff colour with an indistinct longitudinal stripe running the whole length of it, starting close behind the ear and terminating at the shoulder. The body stripes are usually six in number, and well marked. On the outer aspect of the foreleg there are six "switchback" stripes close together, and on the hindleg only four. The fore- and hind-feet are black, covered with short black shiny hairs—the former possess dew-claws. The head is dark greyish buff in colour, and the hair on it is very short. The muzzle is black and hairless, and the ears long. The tail is rather short, and the hairs identical with those of the mane with exception of those hairs towards its terminal part, which are blacker, and may be 120 mm. in length.

DIMENSIONS.—The measurements of a female aardwolf, taken in the flesh, were as follows:

Length of head and body	$25\frac{3}{8}$ in.
„ of tail	$9\frac{1}{8}$ „
„ „ with terminal hairs	$13\frac{7}{8}$ „
Height at shoulder	$17\frac{3}{4}$ „
Round body	13 „
Ears	4 „
Weight	10 lb.

DENTITION.—*i.* $\frac{3}{3}$, *c.* $\frac{1}{1}$, *pm.* $\frac{3}{3}$, *m.* $\frac{1}{1}$ = 32.

DISTRIBUTION.—The aardwolf is found sparsely scattered throughout Somaliland.

HABITS.—Being nocturnal in its habits it is rarely seen before sunset. They are almost invariably seen alone—I have never seen a pair together. They sleep during the day in burrows, some of which are several yards in length, and which in all probability have been made by an anteater. The aardwolf can do but little harm owing to the rudimentary condition of its molar teeth. It is possibly owing to their purely insectivorous diet that their molar teeth, owing to lack of use, have not developed.

An aardwolf which I saw on several occasions used to occupy a burrow within a short distance of one in which an anteater lived, and very possibly used to follow the latter animal about in the hope of sharing the fruits of his neighbour's labours, in the shape of termites. Ants, termites, other insects and possibly birds' eggs form their chief food. The aardwolf is a cowardly animal, and easily killed by a plucky fox-terrier. I have known a bull-terrier enter a burrow and kill the animal inside. When it fights it emits a powerful-smelling secretion from the two glands situated beneath the root of the tail. The largest specimen I have seen was on the Toyo plain—it appeared to be considerably larger than the common jackal.

THE STRIPED HYÆNA

Hyæna hyæna, Linn.

Somali name, *Didthir*, *Whera*

DESCRIPTION.—The general colour of the striped hyæna varies from a brownish grey to a dark grey, according to age—the former being peculiar to the older animals. The body and legs are covered with transverse markings of brown or black. It stands several inches higher at the shoulders than the quarters, and possesses a mane and crest of long shaggy hair. The chin and throat are black. The Somalis say there are two distinct species of this animal, namely "Didthir" and "Whera," but the latter is, I think, the older individual, of the same species, which has become more destructive in its habits. "Whera" are always paler in colour and more often mangy.

MEASUREMENTS in the flesh of—

(i) "Didthir."

Head and body	42 in.
Tail	12 „
Height at shoulder	28½ „
„ „ quarters	25½ „

(ii) "Whera."

Head and body	43 in.
Tail	11 „
Height at shoulder	30 „
Round body	28 „
Weight	73 lb

DISTRIBUTION.—The striped hyæna, though considerably rarer than the spotted variety, is found throughout Somaliland.

HABITS.—The striped hyæna is considerably smaller than his relative, but in his habits is very similar. Lazy and sluggish, he carries his head low when walking along, periodically stopping to sniff around him and then trotting on again. When disturbed he raises his head, gazes for a few seconds, and rapidly gallops or lumbers off. He feeds on offal—his powerful jaws soon disposing of the strongest bones. Unlike *H. crocuta*, he is never seen in packs—at the most two individuals being seen together, but far more often singly. The heat of day is spent under rocks or in the shade of bushes, where he scratches a lair for himself, emerging an hour or so before sunset in quest of food. As age advances he grows very destructive in his habits, hunting sheep and goats in broad daylight and rapidly killing a number without attempting to carry any away. It is to this destructive striped hyæna that the Somalis have given the name of "Whera."

SPOTTED HYÆNA

THE SPOTTED HYÆNA

Hyæna crocuta, Erxl.

Somali name, *Waraba*

DESCRIPTION.—The general colour of the spotted hyæna varies considerably with the age of the individual. When young, they are of a tawny red colour; but as they grow older the fur gets darker and loses its reddish colour. Standing higher in front than behind, with massive jaws, neck and shoulders, he is at all times a hideous beast, and, notwithstanding his undoubted strength, is a great coward.

MEASUREMENTS of an adult male shot at upper Sheikh:

Length of head and body	51 in.
„ „ tail	$10\frac{3}{4}$ „
Height at shoulder	$31\frac{1}{2}$ „
Round body	34 „
„ arm	$16\frac{1}{2}$ „
„ forearm	$8\frac{1}{2}$ „
„ neck	19 „
Length of ear	$4\frac{3}{4}$ „
Weight	115 lb.

DISTRIBUTION.—The spotted hyæna is plentiful everywhere in Somaliland, from the maritime plain to the higher internal plateaux.

HABITS.—Nocturnal in its habits, it only leaves its cave high up on the hillside towards sundown, and makes its way slowly down on to the plains in quest of carrion. In thick bush country it lies up during the heat of day under the shade of the thickest bush it can select. It usually travels at a slow trot, stopping every

now and then to sniff around, and scarcely ever takes heed of where it is going. Notwithstanding its awkward lumbering gait, it can move along rapidly when it chooses, and must cover many miles during the long hours of the night. The spotted hyæna usually goes about singly, although they have been seen in packs of thirty or forty. They only combine when driven to desperation, and, when in this state, lose their cowardly nature, and have been known to attack even the king of beasts. I have never seen more than seven together, and they appeared to be on the warpath.

In Somaliland they are constantly attacking the herds of sheep and goats in the daytime, although they seldom get away with their victims. On many occasions I have known them to enter the Somali huts and seize the little children or old women, inflicting the most hideous wounds. During the great smallpox epidemic they frequently attacked those afflicted with the disease, usually finding them an easy prey owing to their being so often placed in a hut isolated a short distance from the others. Their coats are usually mangy, and sometimes covered with hideous suppurating wounds. Their unearthly howl is so characteristic and well known that it requires no description. They are sometimes heard to laugh, and this is almost human, so closely does it resemble the laugh of a demented person. It appears to be only made when they are annoyed or otherwise excited. I could invariably elicit this weird laugh from a young captive hyæna by taking his bone away from him.

Though they will often attack horses, biting great pieces out of their hindquarters, they seem to have a great respect for donkeys. The latter, when tied up as a "kill" for a lion, are often molested the whole night through by hyænas; but I have never known them to be bitten. Although cowardly, curiously enough it is very unwary, and is easily stalked and shot. On one night, my camp—which happened to be pitched out in the open without a zareba round it—was molested the whole night through by hyænas and jackals, and, notwithstanding my accounting for two of the former and seven of the latter, they continued to annoy until daylight dispersed them.

DIVISION—CYNOIDEA

FAMILY—CANIDÆ

GENUS—CANIS

C. variegatus
C. mesomelas
C. famelicus

GENUS—OTOCYON

O. megalotis

GENUS—LYCAON

L. pictus somalicus

THE GREY JACKAL

Canis variegatus, Cretschm.

Somali name, *Dawa'o*

DESCRIPTION.—The general colour of this jackal is brownish grey all over. The underfur is buff with long black and white hairs distributed all over, but thicker and longer along the middle line of the back. The tail, which is usually scraggy, is pale ochraceous brown, with a brown or black tip.

MEASUREMENTS of a female in the flesh were :

Head and body	25 in.
Tail (without terminal hairs)	11¼ „
Height at shoulder	17 „
Ear (front)	4½ „
Ear (behind)	4¼ „

DISTRIBUTION.—All over Somaliland this jackal is more or less common, but it is perhaps commoner on the Golis, whereas *C. mesomelas* is commoner on Guban. Curiously enough, this is the only jackal I have seen at Sheikh, where it is very common.

HABITS.—This jackal is very noisy, and may be heard giving vent to its weird wail every evening at sunset. It usually gives vent to a peculiar spasmodically uttered cackling sound when hungry, or when it sees a hyæna, which it often runs at, trying to bite at him, and the whole time keeping up this noise and following in the hyæna's wake. I have seen this jackal act thus on more than one occasion. They are very cowardly, even more so than their black-backed relative. This jackal appears to me to be commoner in the open country, while *C. mesomelas* prefers the thick bush.

THE BLACK-BACKED JACKAL

Canis mesomelas, Schreb.

Somali name, *Dawa'o*

DESCRIPTION.—This, the common African jackal, is one of the prettiest of its genus. The general colour on the back is black with spangles of grey hairs; on the sides the fur is rufous, fading underneath. The head is rufous. The tail, which is usually more bushy than that of other members of the genus, is reddish yellow with the terminal portion nearly black.

MEASUREMENTS in the flesh of a male specimen were:

Head and body	$27\frac{3}{4}$ in.
Tail	$13\frac{1}{2}$ „
Height at shoulder	19 „
Round chest	15 „
Weight	17 lb.

DISTRIBUTION.—This jackal is common all over Somaliland.

HABITS.—Nocturnal in its habits, it is frequently seen an hour or two after sunrise and an hour or two before sunset. It is very tame, and will come when hungry within a few yards of the camp. It seems to be bolder than the other species, and is frequently found following the small goats about, awaiting an opportunity to seize and kill one. On one occasion I was passing a small herd of young goats grazing in the bush, when I heard yells from the women in charge. On my inquiring the reason of their cries, they pointed out one of these jackals, which they told me had been responsible for the death of four kids during the past fortnight. They implored me to shoot him, as he had given them no peace since they came to that locality. He used to follow the herd of kids about all day, awaiting his chance to bag one.

On another occasion I was just too late to see another of these jackals which had taken unto itself as a companion a "pariah" dog. These two were well known to the Somalis, and used to hunt together. The dog, which had formerly belonged to some Midgan hunters, had been beaten and driven from the karia, so became wild. I tried hard to come up with this quaint pair, but they had disappeared into the bush. They are practically omnivorous. I have seen them greedily catching and devouring locusts. They do not appear to be quite so noisy as *C. variegatus*.

THE DESERT FOX

Canis famelicus, De Wint.

Somali name, *Dawa'o*

De Winton's description of this fox is as follows: "Fur very long, soft and dense; general colour soft fawn more or less interspersed with coarser grizzled hairs often giving it a steel blue tint. Ears very long, rich fawn colour; the face paler, yellowish buff with strong brown patches immediately above the whiskers, the dark colour slightly modified, encircles the eyes. Along the dorsal line the fur is redder than on the sides, the underfur being grey tipped with reddish brown. There are reddish patches on the back of the hindlegs above the heel. The tail is very thick and bushy along its whole length with a very distinct white tag."

MEASUREMENTS of a female obtained near Berbera by Dr. Atkinson are:

Head and body	445 mm.
Tail	345 „
Hindfoot	122 „
Ear	100 „

DISTRIBUTION.—This fox, as far as I know, is only found on the maritime plain near Berbera, but it probably extends right along the coast eastwards.

HABITS.—The only ones I have seen—a family of four—are, I fancy, still to be found on one of the small sugarloaf hills on the maritime plain within two or three miles of Berbera. On chasing one of these foxes one day I followed it to the top of a low conical rocky hill on the summit of which there was an enormous slab of stone; under this stone lived a small family of these foxes. Strewn around the entrance were bones of every description, human as well as animal, but it is difficult to say whether or not these foxes were responsible for the collection.

THE LONG-EARED FOX.

Otocyon megalotis, Desm.

Somali name, *Golleh waraba*

DESCRIPTION.—This beautiful little fox has a dark-grey appearance. The underfur in the dorsal region is mummy-brown with the basal part slate-white, while the terminal portion of the longer hairs is black with a white band through the middle of it, giving the whole a general grey colour. On the flanks the underfur fades into buff; the throat and belly being of the same colour. The chin, fore and hind feet are black, while the forehead is light grey. The ears are very long, brown at base and black towards the tips. Tail generally very bushy, general colour buff brown with the hairs along the top tipped with black right up to the tip of the tail, which is quite black.

MEASUREMENTS.—The measurements of an adult male among my specimens, are:

Head and body	437 mm.
Tail	285 „
Ear	120 „
Weight	6½ lb.

DISTRIBUTION.—Found all over the internal plateau of Somaliland from the Golis Range away into the Haud.

HABITS.—It is usually stated that the long-eared fox is only seen singly or in pairs—this, curiously enough, has not been my experience in Somaliland. I have more often seen them in small packs than alone or in pairs. On one occasion near Upper Sheikh I came upon at least ten out foraging together. The long-eared fox is quite harmless and is easily tamed, making a delightful pet. In their wild state one usually sees them smelling along the ground digging here and there, for insects presumably. I have never heard them make any noise. They are very common on the Golis Range, but seem to get scarcer towards the Haud, where, curiously enough, I have never seen more than three together. The Somali name "Golleh waraba" means "possessor of a neck like a hyæna."

THE SOMALI WILD DOG

Lycaon pictus somalicus, Thos.

Somali name, *Yeyi*

DESCRIPTION.—The Somali wild dog has only lately been given subspecific rank by Mr. Thomas owing to its "smaller size and its excessively sparse and short fur." The general colour is dark, patches of black and yellow. The undersurface is almost naked. The muzzle and centre of crown are black. The fore-limbs are marbled black and white. Hind-limbs buffy yellow above, the feet black and white. Tail not forming a very thick brush, its short-haired yellow base shorter than the black mesial and white terminal portions. The above is Mr. Thomas's description of a specimen obtained by Major Dunn, R.A.M.C., at Gorahai on the Tug Fafan in Ogaden.

MEASUREMENTS of this specimen, an old female, in the flesh were:

Head and body	890 mm.
Tail	280 „
Hindfoot	193 „
Ear	115 „

DISTRIBUTION.—The wild dog is very rare in Northern Somaliland, but is frequently seen in the Ogaden country, according to native accounts. Personally I have never seen one.

HABITS.—They are said to invariably go in packs, and when hungry will attack and drive off their kills any of the larger Carnivora.

DIVISION—ARCTOIDEA

FAMILY—MUSTELIDÆ

GENUS—MELLIVORA

M. ratel

THE RATEL

Mellivora ratel, Sparrm.

Somali name, *Hor*

DESCRIPTION.—The general colour of the ratel is jet black with a broad band of grey extending the whole length of the back from one inch above the eye to about half-way on to the tail. There is generally a more or less distinct white stripe separating the grey of the back from the black of the underparts. The fur is coarse and not very thick. The ears are quite small in comparison to the size of the animal. The claws on the forefeet are long and powerful, and specially adapted for digging purposes.

MEASUREMENTS of the stretched skin of a fine male shot by me on the Arori plain :

Head and body	896 mm.
Tail	269 „

DENTITION.—*i.* $\frac{3}{3}$, *c.* $\frac{1}{1}$, *p.* $\frac{3}{3}$, *m.* $\frac{1}{1}$; total 32.

DISTRIBUTION.—The ratel is to be found both on Guban, within thirty miles of the sea, and also in the Haud and Nogal.

HABITS.—The ratel lives in holes in the ground, and when pursued will invariably make for the nearest one. Though nocturnal in its habits it is constantly seen about in the daytime. I have seen it singly and in small families of four or five individuals. It cannot travel very fast, and is not difficult to overtake on foot. When in motion it lumbers along like a diminutive bear on all fours, and when hunted it will sometimes turn on its pursuer in the most savage manner.

The ratel is said to be omnivorous, but personally I have usually seen it going along slowly scratching the earth up for insects, etc.

The Somalis are very afraid to tackle it, as they firmly believe that when it bites a man it renders him impotent.

ORDER—UNGULATA

SUB-ORDER—ARTIODACTYLA

DIVISION—PECORA

FAMILY—BOVIDÆ

SUB-FAMILY—BUBALINÆ

GENUS—BUBALIS

B. swaynei

GENUS—DAMALISCUS

D. jimela

SWAYNE'S HARTEBEEST

SWAYNE'S HARTEBEEST

Bubalis swaynei, Scl.

Somali name, *Sig*

DESCRIPTION.—This hartebeest is only found in Western Somaliland and the adjoining parts of Abyssinia as far west as the Great Rift Valley. In its size and the shape of its horns it is somewhat similar to Coke's hartebeest, but can easily be distinguished from it by its very dark coloration. The general colour is a pale chocolate, rather darker on the sides than in the middle line ; this is owing to the fact that the hairs on the top of the withers and down the back are faded at the tips. The general colour fades into a pale reddish fawn on the abdomen. On each side of the body there is an indistinct black smudge; this same smudge is found on the anterior aspect of each rump. On the shoulders and upper portion of the forelegs is a shining black patch, while on the lower part of the forelegs there is another more or less faintly marked black patch. The colour of the upper part of the tail is similar to that on the rumps, the terminal portion consisting of long black hairs. The colour of the head and neck is darker than the general body colour, while the space between the eyes and muzzle is very dark brown or black. The ears are very much paler in colour than the rest of the head and neck, and are rufous with a tendency to black towards the tips. The horns seldom exceed 17 in. in length in the males and 14 in. in the females, and in the former are stout and the annulations well marked.

MEASUREMENTS.—The measurements in the flesh of an adult male shot by me on the plains to the westward of Hargeisa were as follows :

Length from nose to root of tail . . .	107 in.
„ of tail	19½ „
„ (with terminal hairs)	25½ „
Height at shoulder	51 „
Horns :	
Length on front curve	15¾ in.
Tip to tip	24¾ „
Circumference	9¾ „

DISTRIBUTION :—The Sig is only found on the open plains to the west and south-west of Hargeisa, extending as far south as the Toyo plain, whither he strays during the rains (May-August). In scattered herds I have seen them as far south-west as Gomoleh in the Boran country.

HABITS.—The Sig is easily singled out in the distance from other antelopes on the plains owing to its peculiar shape, lumbering gait when in motion and its almost black appearance. Like other members of the same genus, this hartebeest stands very much higher at the withers than the hind quarters, the latter appearing to fall away. When disturbed he lumbers off in an ungainly way for a hundred yards or so and then stands gazing at the hunter. He keeps on repeating these tactics until a shot is fired, when he may run for miles. The staying power of the hartebeest is remarkable, far exceeding that of the oryx or the other antelopes inhabiting the open plains.

THE TOPI HARTEBEEST

Damaliscus jimela, Matsch.

Somali name, *Topi*

DESCRIPTION.—The general colour of this small and beautiful hartebeest is purplish brown, the coat being always very glossy. The forehead, nose, and lower lip are black and there are also black markings on the upper part of the forelegs and thighs. In size it is no bigger than the lesser kudu, but is more heavily built than the latter. The horns, which are stout, and more or less lyre-shaped, are found in both males and females.

MEASUREMENTS.—Unfortunately I never took the measurements of my Somali specimen.

DISTRIBUTION.—I shot the Topi on the north bank of the Juba River, opposite Yonte, in 1902. At that time there were several small herds there, and also on the south bank in British territory. How far north it extends, however, I have been unable to ascertain. The farthest point westwards that I have shot it is at the base of the Nandi escarpment, near the north-eastern shores of the Victoria Nyanza.

HABITS.—The Topi I have never seen in large herds—in point of fact, seldom more than twenty or thirty individuals together—this is what I frequently saw on both banks of the Juba River, but possibly, where the grazing is superior, they are to be found in large herds. Like other hartebeests, their staying power is marvellous.

SUB-FAMILY—NEOTRAGINÆ

GENUS—OREOTRAGUS

O. somalicus

GENUS—DORCATRAGUS

D. melanotis

GENUS—MADOQUA

M. phillipsi
M. swaynei
M. kirkii

GENUS—RHYNCHOTRAGUS

R. güntheri

THE SOMALI KLIPSPRINGER

THE SOMALI KLIPSPRINGER

Oreotragus somalicus, Neum.

Somali name, *Alikut*

DESCRIPTION.—The Klipspringer is the most peculiar of all the Somali antelopes, especially as regards the bristly hair of its coat and the cylindrical formation of its hoofs, on the very tips of which it appears to balance itself when on the alert. In the coat, each hair looks not unlike a diminutive porcupine quill, giving the whole a speckled bristly appearance. The tail is very short. The hair on the abdomen and chest is of a creamy white colour with a tinge of pink in it. The horns, which are short and straight, rise up vertically from the skull, and are parallel to each other throughout their extent—they are annulated for about half their extent, and seldom exceed 4 in. in length. The hoofs, as above mentioned, are peculiar—both the fore and hind ones being absolutely identical—they are perhaps more conical than cylindrical in shape. As a rule, only the males bear horns.

MEASUREMENTS.—The following are measurements of one shot on the Golis Range :

Length from nose to root of tail . . .	30½ in.
Length of tail	3 „
Height at shoulder	20 „
Weight	25 lb.
Horns :	
Length	4½ in.
Circumference at base	2 „
Tip to tip	3¼ „

MEASUREMENTS of an adult male shot near Gidil, Golis Range:

Head and body	29 in.
Tail	3 „
Height at shoulder	21 „
Round body	20 „
Horns:	
Length	$3\frac{3}{16}$ in.
Circumference at base	$1\frac{3}{4}$ „
Tip to tip	$1\frac{3}{8}$ „

DISTRIBUTION.—The Klipspringer is found at an altitude of 3,000 to 6,000 ft. on the Golis Range and Waggar Mountain, the Assa Range, and occasionally on some of the rocky hills at the back of the Golis Range in Ogo-guban.

HABITS.—The agility which it displays when bounding from rock to rock is little short of marvellous; no spot or ledge of rock seems to be too small for it to find a foothold. It is by no means difficult to approach, owing to the fact that it is extremely inquisitive. If the observer sits down and remains motionless, it will often remain standing and gazing at him, giving vent, periodically, to a peculiar noise, which somewhat resembles the spasmodic blowing of a toy trumpet. On one occasion I sat down and watched, for fully half an hour, a pair with a youngster. They were annoyed when I first surprised them, especially the female, who kept on making the peculiar noise described above, but as soon as she had satisfied herself that I meant no harm, she sat herself down on the ledge of a rock and gazed across the ravine at me. Her example was soon followed by her offspring, but the male, who had all along been trying to hide himself behind the rocks and bushes, having now concluded that he was secure, emerged from behind a bush and remained standing the whole time with his eyes fixed on his mate. They all kept on flicking their ears and shaking their heads as though annoyed by flies. As a matter of fact I have never seen a dead klipspringer whose coat did not harbour a wealth of the irritating dog-flies (*hippoboscidæ*). It is very easy to tame, and makes a delightful pet, never straying far from the spot where it has been brought up. Like the Gerenuk, some Somalis won't eat the meat of this antelope.

BEIRA

THE BEIRA

Dorcatragus melanotis, Menges

Somali name, *Beira*

DESCRIPTION.—This beautiful little antelope is peculiar to the Somali country. Herr Menges, from whose specimens it was first described, was the first sportsman to shoot it, although Swayne had known of its existence and had actually seen it some time previously. Its chief peculiarities consist in the very large ears which in the male completely hide the short horns, rendering them indistinguishable from the females at a short distance, and the round, padded hoofs on which they can so nimbly and so silently elude the sportsman. The general colour of the Beira is a glossy grey with a tinge of pink in it. Warm pinkish fawn (Cox). Underneath and on the lower part of the sides the colour is first whitish, then pinkish fawn, and the latter is separated from the grey of the back by a distinct stripe, as is seen in the gazelles. This stripe, which is of a dark purplish grey, is caused by the blending of the grey of the back and the pinkish fawn of the sides. The tail, which is rather short and somewhat bushy, is of the same colour as the back, while the legs, lower part of haunches and head, with the exception of the frontal portion, which is rufous, are of a fawn colour. The hair of the back has the appearance as though it had been singed. Round the eyes there is an indistinct whitish ring. The ears, which are of the same colour as the head, have an edging of dark brown or black hairs. The hoofs, somewhat larger in the fore than hind feet, are furnished underneath with cartilaginous pads, which not only prevent them slipping when running or jumping on rocky ground, but assist them materially, when hunted, in getting away silently. The horns, which seldom exceed $4\frac{1}{2}$ in. in length, are only found in the

males. They are almost straight, but with a slight anterior curve, and are prominently ribbed for the first two inches and smooth and polished for the remainder of their extent. They closely resemble the horns of the oribi.

MEASUREMENTS :

	♂	♀	♀	♂*
Length from nose to root of tail	32 in.	33½ in.	33½ in.	32½ in.
Length of tail	2½ „	3 „	2½ „	†2½ „
Height at shoulder	22¾ „	23¾ „	20½ „	21¾ „
Round chest	19 „	20¼ „	19¾ „	19¼ „
Weight	22 lb.	25 lb.	22 lb.	
Horns:				
Length on front curve	4⅛ in.	—	—	4 in.
Tip to tip	2½ „	—	—	2⅜ „
Circumference at base	2 „	—	—	2 „

From the above measurements it will be seen that the beira female is very much the same size and weight as a klipspringer.

DISTRIBUTION.—The beira has a wider distribution than is generally supposed, as it is to be found on most of the flat-topped hills in British Somaliland. It is perhaps commoner among the Gadabursi Hills than elsewhere, but on the hills to the westward of Bulhar, around Issituggan, on Hegepo and the Dubar Range, and further south on Negegr and the hills south of Sogsodi, it is frequently met with.

HABITS.—The habits of the beira are peculiar in many respects, the chief of them being its unwillingness to leave the place of its choice. Even when hunted it will return again and again to the same spot. They are usually seen in herds of six or seven, consisting of one or two males and the remainder does ; but I have found them sometimes only three or four together, and on one occasion I saw as many as twelve in one herd—this was a single herd, as I saw them again some months later together. When the sportsman first encounters them, it is almost invariably on the flat

* Captain Swire's specimen.

† With terminal hairs . . . . 6 in.
Ear . . . . . 4¾ „ (post-measurement).

top, but within a short distance of the edge of a hill. On one's approach they immediately take to the side of the hill and run with great rapidity over the stones just below the crest. If the hillside is intersected by small ravines they frequently run down one side and up the other without stopping, and invariably sooner or later return to the spot from whence they were driven.

Judging by their tactics when hunted, they rely a great deal on their protective coloration to escape the eye of the hunter. On one occasion after I had driven two beira to the edge of a ravine, and feeling certain in my own mind that in the short space of time that had elapsed before I reached the edge they could not have gone over the opposite crest, I sat down and carefully scanned the opposite side, which was roughly only fifty or sixty yards from where I sat. After one or two minutes I arose, disgusted at losing them, and, handing my rifle to my gun-bearer, turned to go, when the two beira seemed to come out of the stones on the opposite side of the ravine and ran speedily over the top before I could level my rifle at them.

As I mentioned above, they are very faithful to their favourite locality at some particular corner of their table-topped hill, and may be found day after day in very much the same spot. Seldom, if ever, is more than one herd seen on the same hill. Even after one or two members of a herd have been shot, the remainder, if not the next day, certainly within a day or two will be found back again.

They are distinctly difficult to shoot owing to the colour of their coat so closely matching the general colour of their surroundings. They are, however, less difficult to bag when a fog or mist overhangs the hilltops, as is so often the case in the winter months on the Golis Range. It is well to remember when hunting them that the females are perceptibly larger than the males, and that it is well never to choose the largest animal in a herd.

THE DIK-DIKS

General Somali name, *Sagāro* or *Sakāro*

I. PHILLIPS'S DIK-DIK

Madoqua phillipsi, Thos.

Somali name, *Gol Ass*

DESCRIPTION.—The general colour of this little antelope is grey above, cinnamon on sides fading to creamy white below. The frontal tuft of hair is rufous. The cinnamon on the sides varies considerably in extent according to the locality and sex. In the Guban specimens the grey of the back extends further on to the legs and sides and the cinnamon colour is very much paler, almost passing into a buff. The males from Ogo and Ogo-Guban are very much brighter in colour than the Guban ones—sometimes differing so much as to appear to be a distinct species.*

MEASUREMENTS of an adult male shot near Upper Sheikh :

Head and body	20¾ in.
Height at shoulder	14 „
Ear	2¼ „
Tail (with terminal hair)	3 „
Horns :	
Length	2⅝ in.
Tip to tip	1⅛ „
Circumference	1¼ „

DISTRIBUTION.—This Dik-Dik is ubiquitous in Northern

* I have, since writing the above, given the Guban variety subspecific rank, under the name *M. phillipsi gubanensis* (vide *Ann. and Mag. Nat. Hist.*, Ser. 8, vol. iv., July 1909).

Somaliland. Its habitat extends from the low-lying coast districts to the Haud.

HABITS.—The habits of all the dik-diks are similar. They prefer the dry acacia-thorn bush country, and are equally agile in the stony as the flat country. They are especially fond of the aloe bush, where they can hide and escape observation with comparative ease. Although somewhat shy they can usually be surprised and bagged with a shot gun. When startled they often dash off with a series of leaps, uttering a peculiar note resembling the words "Ghuss, ghuss." The Somali name for this species, namely "Gol Ass," means "red-sided." They all usually inhabit waterless parts, and depend a great deal on the heavy dew for moisture. They are never seen more than three together and usually only two—the third being their offspring.

II. SWAYNE'S DIK-DIK

Madoqua swaynei, Thos.

Somali name, *Guyu*

DESCRIPTION.—This Dik-Dik is smaller than Phillips's, and instead of cinnamon has yellowish fawn on the sides.

MEASUREMENTS in the flesh of a male specimen of mine were:

Head and body	22½ in.
Tail	1½ „
Height at shoulder	13 „
Ear (in front)	2⅜ „
Ear (behind)	3 „

DISTRIBUTION.—It is found in the Haud and westwards as far as the River Web.

HABITS.—Similar to the foregoing.

III. KIRK'S DIK-DIK

Madoqua kirkii, Günth.

DESCRIPTION.—This Dik-Dik is somewhat similar in colour to Swayne's and is paler than *R. güntheri*, which it resembles in other respects, not possessing quite so pronounced a muzzle.

MEASUREMENTS.—No measurements in the flesh of this animal have ever been taken, but it is practically the same size as *R. güntheri*.

DISTRIBUTION.—This is the most southern of all the Somali dik-diks. The type specimen came from Brava and was named after Sir John Kirk.

HABITS.—Similar to the other dik-diks,

IV. GÜNTHER'S DIK-DIK

Rhynchotragus Güntheri, Thos.

Somali name, *Ghussleh* or *Gussuleh*

DESCRIPTION.—General colour grizzled yellowish grey, fading to fawn on sides with white underneath, its great peculiarity being its prominent and elongated snout.

MEASUREMENTS in the flesh of an adult male are as follows :

Head and body	21½ in.
Tail	1½ „
Height at shoulder	12¾ „

DISTRIBUTION.—This Dik-Dik is found all over Southern Somaliland as far south as Jubaland and west to Lake Baringo. It is also found in the extreme west of the Somali country.

HABITS.—Similar to the other dik-diks. The Somali name, " Ghussleh," the meaning of which is possessor of " Ghuss," is given to it owing to its habit of darting away when surprised, giving vent to a noise like " Ghuss, ghuss, ghuss."

SUBFAMILY—CERVICAPRINÆ

GENUS—COBUS

C. defassa

SUBFAMILY—ANTILOPINÆ

GENUS—GAZELLA

G. spekei
G. pelzelni
G. soemmeringi

GENUS—LITHOCRANIUS

L. walleri

GENUS—AMMORDORCAS

A. clarkei

WATERBUCK

Cobus defassa

Somali name, *Balengo*

DESCRIPTION.—The waterbuck is similar to those found on the other rivers in Abyssinia and East Africa. Grey-brown, with a shaggy coat all over, this handsome antelope possesses a distinctive white patch behind on each rump. The colouring of the legs varies greatly, from a pale brown to nearly black.

MEASUREMENTS.—I have been unable to get the measurements of a specimen shot in Somaliland.

DISTRIBUTION.—Only found, as its name signifies, in the vicinity of water—hence rare in the Somali country. It is, however, common on the Webi, Shebeleh, the Web and the Juba rivers.

HABITS.—During the day the waterbuck seeks the shade of the dense bush bordering the rivers, but strays miles from the river-banks during the night, returning as a rule at grey dawn. When the grass is green it often does not return to the rivers for days.

SPEKE'S GAZELLE ♀

SPEKE'S GAZELLE

Gazella spekei, Bly.

Somali name, *Dhero*

DESCRIPTION.—Speke's gazelle is by far the commoner of the two gazelles known to the Somalis by the name "Dhero." It is often known as the "plateau gazelle," as distinguished from *G. pelzelni*, which is the lowland or maritime variety. The general colour is brownish fawn above and white underneath, the latter being separated from the former by a distinct lateral dark, dusky brown band. It is somewhat smaller than *G. pelzelni*, and differs from it mainly in possessing on its nose a peculiar corrugated protuberance, which it can inflate at will. This protuberance, which, when uninflated, has the above-mentioned corrugated appearance, consists of two cavities, lying side by side and communicating separately with each nasal cavity, and also by a common opening with each other.

MEASUREMENTS of a stretched skin were as follows :

Length from nose to root of tail . .	3 ft. 8 in.
„ of tail	6 „

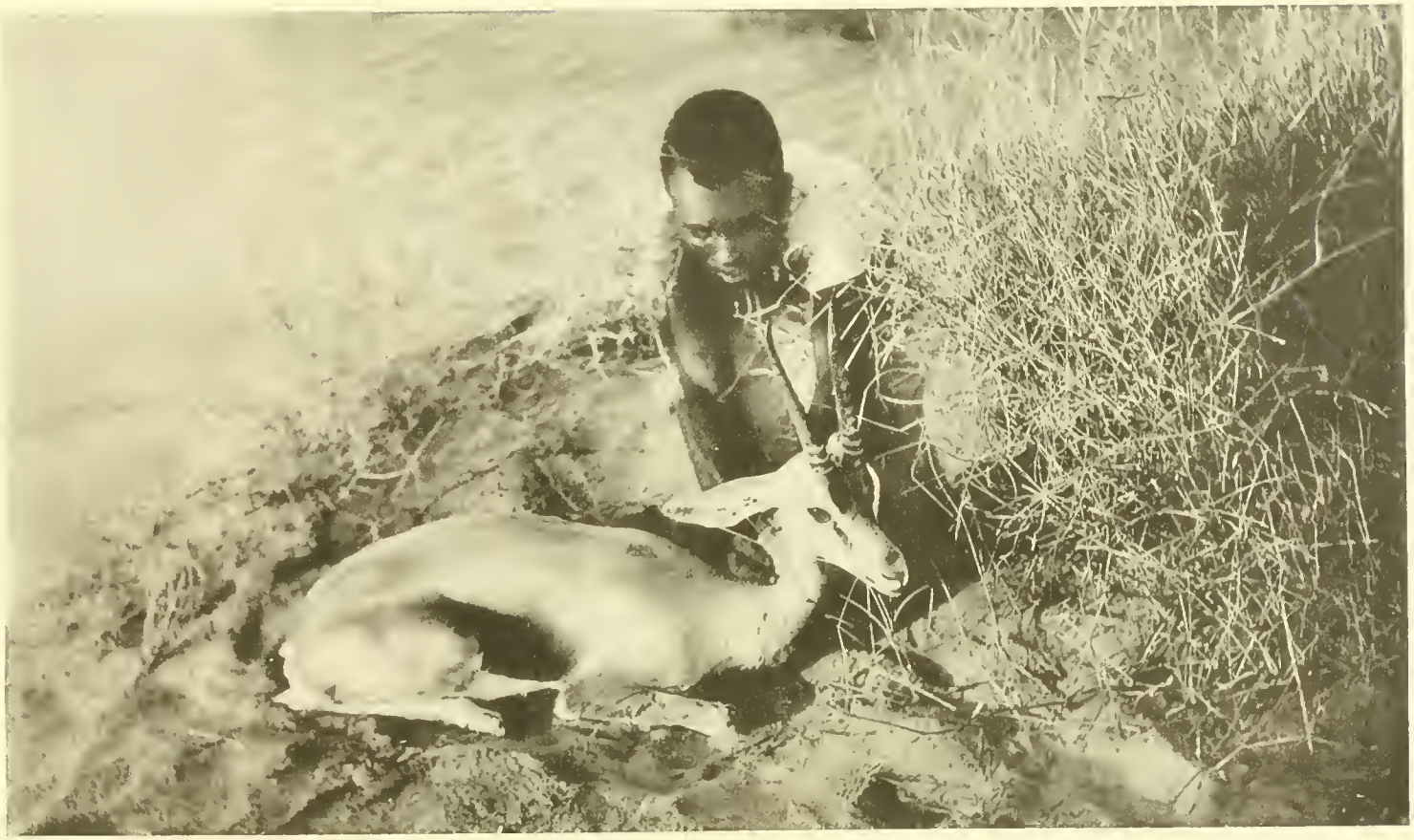
The weight of an adult male weighed by me was 47 lb.

Horns :

Length on front curve	$10\frac{3}{4}$ in.
Tip to tip	4 „
Circumference	$3\frac{5}{8}$ „

DISTRIBUTION.—Speke's gazelle is found within 12 miles of the coast and from there onwards to the Haud, in suitable localities.

HABITS.—They seem to prefer the stony ground to the flat plains, and wherever there is a stretch of stony flat at the base of a hill or on the top of one of the numerous table-topped hills so common in Somaliland, a herd or more of these pretty little antelopes is sure to be found. They are usually seen in herds of five to twelve individuals, and are quite easy to approach. When disturbed and uncertain which way to run, they stand or strut along flicking their tails until one of the herd gets startled and leads them away. They seldom go very far, invariably returning to their old haunts when danger has passed.



PELZELN'S GAZELLE ♂

PELZELN'S, OR THE LOWLAND GAZELLE

Gazella pelzelni, Kohl.

Somali name, *Dhero*

DESCRIPTION.—This gazelle is very similar to Speke's, but differs from it in not possessing the nasal protuberance and being of a more rufous colour. The side stripe is dark rufous, and is never dusky brown or black as in Speke's gazelle. The horns are slightly different in the two species—being rather more curved in Speke's than the present species. The females of both carry horns, but they differ from each other in that the female horns in the "upland" species are usually longer and more nearly resemble those of the male than is the case in the "lowland" variety. On Guban one occasionally comes across female specimens of the upland very closely resembling those of the lowland.

MEASUREMENTS of a stretched skin were :

Head and body	3 ft. 8½ in.
Tail	5 „

DISTRIBUTION.—Pelzeln's gazelle is only found in the desert maritime regions, being replaced about twenty miles from the coast by Speke's. Specimens have been obtained further inland, but never beyond the natural barrier of the Golis Range.

HABITS.—Like Speke's gazelle, they are usually found in small families of four or five individuals, and are very easy to approach. They browse on the stunted acacias so common on the maritime plain, and other short stubbly plants, and seem to require little or no water. Like *G. spekei* they seem to prefer stony ground, where there is little or no bush.

SOEMMERING'S GAZELLE, OR THE "AOUL"

Gazella soemmeringi, Cretschm.

Somali name, *Aoul*

DESCRIPTION.—The Aoul is one of the commonest of the Somali antelopes, and undoubtedly the easiest to shoot. The general body colour is fawn, and where this joins the white of the underpart there is no dark band as is commonly seen in the gazelles. The fawn on the back and sides does not extend to the tail, being separated from it by a conspicuous white band. The whole of the posterior part of the rump is pure white together with the root of the tail, the terminal portion being black. The head is very handsome, the whole of the frontal portion from the space between the horns to the nose being quite black in the males and dark brown or black in the females. There is also a faintly marked dark eye-stripe, which is separated from the frontal patch by an interspace of the general body colour. Both males and females possess horns, those of the latter being very much more slender than the former. The horns in the males normally pass upwards, backwards, and outwards until the terminal portion is reached, when they abruptly turn inwards, forwards, and slightly downwards.

MEASUREMENTS of an adult male in the flesh :

Length from nose to root of tail . . .	53 in.
„ of tail	$10\frac{1}{2}$ „
Height at shoulder	36 „

Horns 17 in. in the male and 16 in. in the female are the average.

DISTRIBUTION.—Soemmering's gazelle is common in suitable localities. Wherever there are grassy plains "Aoul" are sure

to be seen grazing in small or large herds just like sheep. On the plains near Bulhar they are seen in small herds only, but on Toyo, Arori, and the huge plains to the west and south-west of Hargeisa, very large herds are frequently seen.

HABITS.—They can usually be approached to within 100 or 150 yards, and if pursued on horseback can be very easily run down. They invariably go in herds and never singly, except in the case of an old buck who has been driven from the herd. When hunted they always keep to the open plain. I have never seen them eating anything except grass. On the plains they can be seen grazing in among the herds of camels, hardly taking any notice of them, and should a camel be used in stalking them they can be approached within 40 or 50 yards.

THE GERENUK, OR WALLER'S GAZELLE

Lithocranius walleri, Brooke

Somali name, *Gerenuk*

DESCRIPTION.—This peculiar antelope might well be called the giraffe antelope, owing to its resemblance to that quadruped in its general appearance. Its peculiarities are its long legs, flat skull, elongated muzzle, together with its long giraffe-like neck. The horns, which are only present in the males, are very massive in comparison with the skull.* The general colour of the Gerenuk is a reddish fawn with a broad band of dark brown running down the back and along upper third of sides. The eyes, which are large and prominent, are surrounded by a light brownish-white band, while the frontal portion down to the nose is of a bright rufous. The shape of the nose and muzzle is not unlike that of a camel.

MEASUREMENTS.—The following are the dimensions of a good average male gerenuk shot in Ogo-Guban :

Length of head and body	57	in.
Length of tail	9	„
Height at shoulder	41	„
Round the body	31¼	„
Weight	95	lb.

* The horns, considering their length, are remarkably massive at the base, and look out of all proportion to the slender flat skull. On rising from the skull they almost immediately curve backwards and upwards for half their length, then upwards for about a quarter, and finally quite suddenly form hooks at the terminal quarter. The last quarter forming the hook may project directly forwards, but more commonly forwards and slightly inwards, and never directly inwards as in the springbuck. The terminal quarters are very frequently unsymmetrical. The lower two-thirds of the horns are prominently ribbed, though sometimes filled with caked mud, while the remaining one-third is smooth and polished.

WALLER'S GAZELLE

Horns:

Length on front curve	14 in.
Tip to tip	$2\frac{5}{8}$ „
Circumference at base	$5\frac{5}{8}$ „

DISTRIBUTION.—The gerenuk is one of the commonest of the Somaliland antelopes, ranging throughout the Somali country. The most southern limit of the gerenuk, as far as I am aware, is the country in the neighbourhood of Lake Baringo, but here they are by no means plentiful, as I have looked for them on more than one occasion without even coming across their spoor. North of the Tana River they become commoner, and are fairly plentiful in Jubaland. In the Somaliland Protectorate they are to be found on the maritime plain within a few miles of Berbera. In Guban, however, they are nowhere plentiful, while in Ogo-Guban and Ogo they are very common.

HABITS.—The habits of the gerenuk are somewhat characteristic. It lives almost entirely by browsing on the numerous species of acacias which abound in its natural habitat. As is the case with the domestic goats in Somaliland, the gerenuk is forced in the drier months of the year, when the green shoots within its reach are eaten away, to rise up on its hindlegs, with the forelegs resting on the lower branches, and browse off the topmost branches of the stunted acacias which are its favourite food. When disturbed it will stand and gaze for a few seconds at the intruder and then, shooting forward its head and lowering its neck until it is nearly on the same plane as its back, it will trot off for a hundred yards or so, only to come to a standstill behind some bush and peer over it, in order to make certain of the intentions of the sportsman. Unlike Clarke's gazelle ("Dibatag"), he curls his tail closely round between his haunches when running, giving the appearance as though that appendage was wanting. The gerenuk is at times very difficult to see when standing still, and is, on one's first acquaintance with him, by no means easy to bag. He is to be found wherever acacias abound, and in Somaliland—that is, with few exceptions—nearly everywhere. He is frequently found in uneven country, but prefers the flat bush country.

Sometimes, when hunted, he will take to the hillsides, but will

endeavour to return to the flat as quickly as possible. Gerenuk are usually seen in small herds of six or seven, consisting of one buck and the remainder does. The male is very well-cared-for and protected by the does. I have repeatedly had to lower my rifle owing to the fact that one of the does has interposed herself in front of the buck on seeing him exposed. I am convinced this is more than a mere coincidence, as it has so often happened, and I have never seen the buck leave the does entirely. On one occasion, after following a herd up one of the flat-topped hills so common in Northern Somaliland, I found, on reaching the top, that one side was almost precipitous, so I drove the herd towards this side and got within fifty yards of them. They stood still, not knowing which way to make off. During the whole time the buck was closely surrounded by seven or eight does, which eventually huddled together and jostled him off, and I never got my shot after a long and tiring stalk.

CLARK'S GAZELLE

CLARKE'S GAZELLE

Ammordorcas clarkei, Thos.

Somali name, *Dibatag*

DESCRIPTION.—This interesting animal was discovered by T. W. H. Clarke in 1890, and is one of the most peculiar of the Somaliland antelopes. The general colour is slaty-grey with a pinkish tinge in it, especially on the flanks. When the sun is shining on them the colour appears to be light bluish-grey, rendering them very difficult to see when standing motionless in the dried-up country in which they are commonly found. Immediately they turn and run off with tails erect, they are easily seen owing to their white buttocks. On the face there is a frontal and nasal chestnut patch, on each side of which is a white band. There is also a patch of white on the throat. The tail is almost entirely black.

Dibatag are smaller and lighter than gerenuk, and can easily be distinguished from them. Only the males possess horns. The horns, which are ringed for about half their extent, pass directly backwards, upwards, and slightly outwards; then, taking rather a sudden bend, travel upwards, forwards, and outwards. They seldom diverge much at the tips, 4 to 5 in. being the rule—a head in my possession, however, is as much as $7\frac{7}{16}$ in. from tip to tip.

The most noticeable features about this antelope are its long neck, flat skull, and long tail, which it always erects when running. The ears of the gerenuk and dibatag differ—the former's being pointed, while the latter's are rounded at the tips.

MEASUREMENTS of a male shot in the Dholbanta country:

Head and body	46 in.
Tail	14 „
Tail (with terminal hairs)	15½ „
Round body	26½ „
Height at shoulder	35 „
Weight	about 60 lb.
Horns:	
Length	8¾ in.
Tip to tip	5 „
Circumference	3¾ „

The record head, according to Rowland Ward, measures 13 in.; however, horns measuring 10½ in. are very good, and not often seen.

DISTRIBUTION.—This antelope has a very much larger distribution than is usually supposed. It has been found 30 miles north-east of Ber at Galol Dobleh (Parkinson), but it is more commonly found throughout the Nogal Valley and the Haud to within a few miles of Obbia on the east coast, Milmil in the west, and the Webi Shebeleh in the south. Lately Herr Schillings procured a head near Kilimanjaro from a native caravan, but he was unable to ascertain how they came into possession of it.

HABITS.—The habits of the dibatag are very similar to those of the gerenuk. They occupy very similar country except that the former are seldom, if ever, found in broken country, where the latter are so often seen. They both inhabit the waterless tracts, and can exist for months and months without water. Both species are, moreover, frequently seen grazing together.

Sometimes, especially when the sun is shining on their coats, it is rather difficult to distinguish between them until they start to run; whereas the gerenuk runs with head and tail down, the dibatag makes off with head and tail erect. The tail of the dibatag when in motion is held almost perpendicular, while the head is carried well back.

Dibatag, like gerenuk, are usually found singly or in small families of three, four or five individuals—five is the largest number I have ever seen together. Like gerenuk, they are almost entirely

browsers—I have never seen them eating grass ; they are very fond of the yellow fruit of the shinu-shinu plant. Dibatag, according to the Somalis, are nearly always found in the same country which produces the stunted trees known as "ged guwah." There are six trees which are usually known as the "ged guwah," and they are all very similar in appearance. They are (i) Garone, (ii) Rahanreb, (iii) Tebuk, (iv) Golelu, (v) Mogoleh, and (vi) Ainger. Numbers ii, iii, and iv bear thorns, and the remainder are without them. These trees in the dry season are generally leafless, and the colour of the bark exactly matches the dibatag's coat. The best method of looking for dibatag is to climb one of the white-ant hills which abound in the Haud and scour the country with glasses, or ride through their haunts on a camel.

SUB-FAMILY—HIPPOTRAGINÆ

GENUS—ORYX

O. beisa

SUB-FAMILY—TRAGELAPHINÆ

GENUS—TRAGELAPHUS

T. scriptus decula

GENUS—STREPSICEROS

S. kudu
S. imberbis

ORYX

THE ORYX

Oryx beisa, Rüpp.

Somali name, *Be'id* or *Bi'id*

DESCRIPTION.—The oryx is the commonest of the larger Somali antelopes, and has a wider distribution than any except perhaps the gerenuk. It stands lower than the Greater Kudu and somewhat higher than the Lesser Kudu—its height at the shoulder being about 4 ft. Both the males and females bear horns—those of the latter being more slender and as a rule longer and frequently unsymmetrical. In both sexes they are nearly straight with a slight backward curve, and are annulated for about half their length and polished for the remainder. Horns from 32 to 33 in. in length in either sex are distinctly good. It is perhaps surprising that there are still so many herds of oryx beisa in the Somali country, considering how keenly the Midgan hunters prize the male oryx for the thick skin over the withers (Somali name, "gashan") which is utilised in the manufacture of the Somali shields. The presence in Somaliland of so many of this species I consider a good argument against those who are inclined to blame the natives for the disappearance of the game. The colour of the oryx varies from grey to a reddish-grey above and white on the abdomen. A narrow black band runs along the centre of the back, and on each side is another broader band which unites with its fellow of the opposite side, on the chest; after uniting it broadens out on the throat, forming a diamond-shaped black patch from which there is a more or less distinct black line continued on to the side of the face as far as the base of the ears. The black nose-stripe is continuous with the black frontal patch, but separated from the black eye-stripe by a whitish interspace.

MEASUREMENTS.—The measurements of the stretched skin of an adult male shot in the Haud were:

Length from nose to root of tail . .	7 ft. 5 in.
Length of tail	1 „ 3 „
„ „ (with terminal hairs) . .	2 „ 6 „

DISTRIBUTION.—The oryx beisa is found in suitable localities all over Somaliland: on the parched-up stony flats intersected with sand dunes to the east of Berbera; on and around the table-topped hills between Bulhar and Berbera; on the hillsides at Salai and Issituggan; in herds on the rolling plains to the west and south-west of Hargeisa; and in the Khansa bush country and Nogal Valley. Oryx are not difficult to shoot, if a horse is employed in hunting them; they very soon tire and are easily bagged. On the plains they are rather wild, but a shot at 150 yards can usually be got by stalking them, behind a camel. When hunting oryx in the bush it is better to follow up a single spoor in preference to the tracks of a herd, as the single spoor invariably turns out to be that of an old bull.

HABITS.—Oryx are always to be found in herds, although on the plains it is a common sight to see odd members feeding alone. Where grass is plentiful, as on the plains in Western Somaliland, herds of thirty or more may be seen dotted about over the wide expanse, but on the rocky hills near the coast the herds are much smaller and usually only number seven to twelve individuals. Oryx can go without water for long periods at a time, depending entirely on the heavy dews for moisture, like the dik-dik and maritime gazelle. When wounded or brought to bay the oryx is very pugnacious. He lowers his head, pointing his horns at his antagonist, and charges in the hope of transfixing him. When wounded, however, and lying on the ground he will sweep round in a semicircular fashion with his horns, and woe to the native shikari who in his excitement rushes at a wounded oryx to "halal" him without due precautions.

BUSHBUCK

Tragelaphus scriptus decula, Rüpp.

Somali name, *Decula*

DESCRIPTION.—This antelope varies greatly in colour, but is easily distinguished by its peculiar horns and its reddish-brown skin covered with white spots.

MEASUREMENTS.—I have been unable to get the measurements of this bushbuck.

DISTRIBUTION.—Found in the dense bush bordering the rivers Webi, Webi Shebeleh, and Juba.

HABITS.—Very shy in its habits, this antelope is seldom seen except when it approaches the water's edge at daylight or sunset to drink. Towards sunset it very often gives vent to a peculiar harsh bark which resembles the bark of a baboon. This bark is probably the male calling to its mate.

THE GREATER KUDU

Strepsiceros kudu

Somali name, *Godir*, *Ghorialeh*

DESCRIPTION.—The correct Somali names for the Kudus seem to give rise to a good deal of confusion, so I will explain them here. "Godir" is the name applied to the males of both the Greater and Lesser Kudus, and "Aderyo" for the females of both species. The distinctive name for the male of the Greater Kudu is "Ghorialeh" (*i.e.* possessor of wood), whereas that for the male of the Lesser Kudu is "Dar 'ad" (*i.e.* white side). "Arreh" (*i.e.* possessor of spots) is the general name for the Lesser Kudu of both sexes. The Greater Kudu is the grandest of all antelopes, and the largest of the Somali antelopes. It is a magnificent animal, and is seen to perfection surrounded by the delightful scenery of its natural habitat. Whether standing erect on the mountain side or quietly grazing in the valleys, or dashing through the bushes with its horns thrown well back and its head thrown forward, or trotting leisurely along the tracks he has himself made on the rough hill-side, he bears himself like a monarch. The Greater Kudu bull stands from 4 ft. 6 in. to 5 ft. at the shoulder. He possesses long spiral horns which round the curve may reach a length of 5 ft.—the longest Somaliland specimen measured by me was 61½ in. round the curve. The stripes on the Greater Kudu vary considerably in distinctness, although their number is fairly constant. There are usually seven more or less distinct stripes on each side, each of which corresponds to its fellow on the opposite side, although on one side any one stripe may be less distinct than its fellow of the opposite side. The second, third, fourth, and seventh or last are more often permanent and distinct on both sides than the others, which may be absent or only faintly marked on one or the other side.

GREATER KUDU

The fourth stripe is usually the longest, while the seventh is the shortest. Perhaps the two most distinctive features of the Greater Kudu are its long beard and interocular white band. Only the males possess horns.

MEASUREMENTS of an adult male shot at Gidil near Sheikh :

Length from nose to root of tail	98 in.
Length of tail	15½ „
Height at shoulder	61 „
Girth round the body	?
Weight	?

Horns :	R.	L.
Length straight.	39½ in.	39¾ in.
Length on front curve	55½ „	54½ „
Tip to tip	27¾	
Circumference	10	

DISTRIBUTION.—Greater Kudu are invariably found in rough hilly or mountainous country, and as a rule fairly close to water. They are plentiful all along the Golis Range and on Waggar Mountain, the Negegr plateau, and some of the hills around Sogsodi. They are also to be found on the hills around Issituggan, and from there onwards into the Gadabursi Hills.

HABITS.—The male Greater Kudu is seldom seen alone except in the breeding season, when the does leave the hills and descend to the plains or valleys to drop their young. Occasionally a very old bull is driven out from a herd and forced to roam the hills alone. A herd usually consists of one full-grown male and three or four females and young. Sometimes a herd will be found to consist of two or three young males and about the same number of females.

The adult male will sometimes leave his herd and wander by himself for days. When thus found alone he will occasionally allow you to approach within thirty or forty yards and will stand snorting and pawing the ground as though defying you to go nearer, whilst at other times he will not allow you to get within two or three hundred yards of him. He spends the heat of the day in the shade on the hillsides and the

remainder of the twenty-four hours grazing either in the valleys or grassy plateaux in the neighbourhood. Each herd keeps to its own particular haunts, seldom straying very far.

During the last few years, owing to their being carefully preserved, they appear to be slowly increasing in numbers. Swayne mentions a case of an unwounded bull Greater Kudu making, at some thirty yards' distance, a determined charge at a man whom he had sent to guard the mouth of a gorge. Whether this charge was really directed at the man or not it is difficult to say, but I fancy the mouth of the gorge must really have been the way he intended to escape. The ears of the Greater Kudu are large and he requires very careful stalking, as long before he sees you he hears you and makes off.

I once saw a herd of seven which had not seen me but apparently had heard my approach, as they exhibited great uneasiness and could not make up their minds which way to escape; so I sat down and watched them, when, after walking round and round each other for a few seconds, they made off in the opposite direction. The Greater Kudu, living as he does almost entirely among the hills and seldom, if ever, leaving them, never trespasses on the preserves of the Lesser Kudu, which never takes to the hills but is invariably found in thick bush country where there is plenty of shade for it to lie up in during the heat of the day.

THE LESSER KUDU

Strepsiceros imberbis, Bly.

Somali name, *Godir*, *Arreh* (male)
or *Dar'ad* ,,
Aderyo (female)

DESCRIPTION.—This is undoubtedly the most beautiful of all Somali antelopes. The general colour is a grey-brown, which fades into a pale fawn on the legs. Immediately above the hoofs on both the fore and hind legs is a whitish patch. The throat and chest are black except for two patches of white on the former—one, the smaller, high up, the other a broad transverse bar of white situated just above where the neck joins the chest. The head is of the general body colour except from a line drawn between the eyes to the nose, where it is black. The upper and lower lips are white. There are two white spots one above the other on each side, situated over the lower jaw, while two white streaks pass directly downwards and inwards from the inner canthus of each eye towards the middle line of the face. The ears are large and well adapted for hearing in thick bush country. The fur on the head and neck is very soft and fine, giving those parts a soft, silky appearance. The tail is grey-brown above, white underneath, with a brown-black tip. There is a longitudinal white stripe running from the withers nearly to the root of the tail, and from this spring numerous transverse white stripes which give this antelope a singularly beautiful appearance. The stripes, as in the Greater Kudu, are seldom equal in number on both sides. On an adult male shot by me there were fourteen on the left side and thirteen on the right. The last stripe is usually very indistinct on both sides, while the second and third terminal stripes usually join soon after they arise, and are continued as one stripe. Between some of the stripes there are, as a rule, one or two spots or streaks. According to Swayne, the specimens from the Webi Shebeleh River are smaller and more brilliantly marked, and possess shorter horns and elongated hoofs.

MEASUREMENTS.—The following are the measurements of an adult male shot at the foot of the Golis Range in British Somaliland:

Head and body	66½ in.
Tail	11 „
„ (with terminal hairs)	14½ „
Height at shoulder	43 „
Round the body	42½ „
Horns:	
Length on front curve	27¼ „
„ straight	22 „
Tip to tip	10½ „
Circumference at base	6 3/16 „

This is a fair average head. Rowland Ward records a pair of horns, the property of Mr. Norman B. Smith, 35¼ in. in length.

DISTRIBUTION.—The Lesser Kudu is found in suitable localities throughout Somaliland and as far south as the Tana River, south of which it does not appear to be found. It lives in the thick bush country, being very partial to those localities where the Sansivieria abounds.

HABITS.—The Lesser Kudu is either seen singly or in small herds of three to five individuals. Those seen singly are invariably males; sometimes two young males will be seen together. They are not difficult to approach owing to their relying so much on their coloration for protection. In the dry bush country it is not always easy to differentiate between them and the dried-up bush, so still and erect do they stand. A male Lesser Kudu will sometimes allow one to walk up to within ten yards or so before he jumps up and, with one or two graceful leaps and bounds, clearing any obstacle six feet or more in height, gallops or trots away. In the thick aloe bush they rely a great deal on jumping, and I have seen a frightened buck clear a bush well over six feet in height. When disturbed, they make a peculiar barking noise. I have heard the females make this noise on several occasions, but I cannot say whether the males also make it. They are sometimes found near water, while others inhabit quite waterless districts, such as the bush country bordering the Haud.

DIVISION—SUINA

FAMILY—HIPPOPOTAMIDÆ

GENUS—HIPPOPOTAMUS

H. amphibius

FAMILY—SUIDÆ

GENUS—PHACOCHŒRUS

P. æthiopicus

HIPPOPOTAMUS

Hippopotamus amphibius, Linn.

Somali name, *Hawas* and *Jehas*

DESCRIPTION.—This great pachyderm requires no description.

MEASUREMENTS.—The river specimens are almost invariably smaller than those in the larger lakes, and are possibly a distinct species.

DISTRIBUTION.—Found in numbers in certain deep pools along the Webi, Webi Shebeleh, and Juba rivers.

HABITS.—Sleeps in the river during the day and feeds all night on the banks, travelling often many miles to some favourite grazing ground, but always returning before the dawn. In early morning when enjoying a bath he keeps rising frequently to the surface of the water, giving vent to a great booming noise which may be heard some distance from his haunts.

THE WARTHOG

Phacochœrus æthiopicus, Cuvier.

Somali name, *Dofar*

DESCRIPTION.—The warthog is the most hideous and repulsive-looking of all the Somaliland mammals. The most distinctive features about him are the presence of three warts or protuberances on each side of the face, a long mane or crest along the back, and a pair of formidable-looking tusks. The female has only two pairs of warts.

MEASUREMENTS:

Head and body	4 ft. 10 in.
Tail	1 „ 6 „
Height at shoulder	2 „ 7 „

DISTRIBUTION.—The warthog is common in well-wooded country not far from water. All along the Golis foothills and in the country immediately north of the range, especially along the watercourses and in and around the valleys near Wagar Mt., they are very common.

HABITS.—Although frequently found singly or in couples, the warthog is usually seen in company of a female and about half a dozen half-grown individuals. They live entirely on roots of grasses and bulbs. They sleep during the heat of the day under bushes, repairing to water about sundown and feeding at night. They are easy to bag, and even when wounded never attempt to attack their assailant. When disturbed during the day they trot off in single file with tails erect, and if left alone for a few minutes soon settle down in the shade again.

WARTHOG

SUB-ORDER—PERISSODACTYLA

FAMILY—EQUIDÆ

GENUS—EQUUS

E. asinus somalicus
E. grevyii

FAMILY—RHINOCEROTIDÆ

GENUS—RHINOCEROS

R. bicornis

THE SOMALI WILD ASS

Equus asinus somalicus, Sclat.

Somali name, *Gumburi* or *Dameir dibbaded*

DESCRIPTION.—The Somali wild ass is a magnificent beast, being very much larger than the Somali domestic donkey. Light grey in colour, with white muzzle and a white ring round the eye; he is always fat and in the pink of condition. The distinctive features about him are a short thick mane with black grey-tipped hairs, boldly striped fore and hind legs, a brown or black shoulder stripe (which is not constant), and a black brush at the end of his tail.

MEASUREMENTS.—Owing to their being strictly preserved I was unable to get their measurements. They stand about as high as a good-sized Somali pony at the withers—12–13 hands. The measurements of a stretched skin in the British Museum are:

Head and body	7 ft. 9 in.
Tail	1 „ 6 „
„ with terminal hairs	2 „ 2 „

DISTRIBUTION.—As the Somali name implies, the wild ass is always found on low-lying rocky hills (Gumburi). They are common to the eastward of Berbera, behind Siyaro, in among the sand dunes and rocky hills, and also south of Bulhar in similar localities, especially around the Issituggan Valley. South of the Golis Range they inhabit the low stony hills around Halo, Haloka Yer, and near Segig; they are also found on Negegr Plateau.

HABITS.—Wild asses are usually seen in herds of four or five individuals and not uncommonly singly, away from all other game. They are sometimes seen near, or in company with, oryx,

inhabiting the same kind of country in Guban and Ogo-Guban, and subsisting on dry grass. They keep within distance of water, probably not going more than three or four days without it except in the dry season.

They are very inquisitive. One evening, having halted my caravan in a deserted zareba and turned the mules out to graze, a wild ass chased one of the mules to within thirty yards of where I was lying on my bed. As is frequently the case, this one was wandering about alone. They are difficult to approach after once being scared, and the sportsman would be lucky to get within four hundred yards of them. Like oryx they can travel very fast over stony ground—their hoofs being very hard. Somalis will not touch their flesh. The alternative name " Dameir dibbaded " by which they are known among Somalis means the outcast donkey.

GREVY'S ZEBRA

Equus grevyii, Oust.

Somali name, *Faro*

DESCRIPTION.—This is a small and dark zebra. The black stripes being broad and very close together give it the appearance in the distance of a black pony. Some years ago this species was plentiful enough on the plains in Western Somaliland, but to-day they are to be found in much diminished numbers. Has very large ears, not unlike a Greater Kudu's in shape.

MEASUREMENTS.—Grevy's zebra stands about 13 or 14 hands at the shoulder. The measurements of a rather small skin in the British Museum are :

Head and body	6 ft. 7 in.
Tail	1 „ 3 „
„ with terminal hairs	1 „ 9 „

DISTRIBUTION.—In Western Somaliland. Commoner in the Ogaden country than elsewhere.

HABITS.—Grevy's zebra seems to prefer undulating rocky bush country to any other. It is invariably seen in small troops of ten or twelve individuals. The older males are generally covered with scars, showing them to be very pugnacious. While hunting through the dense bush in localities where they are known to be, they are soon found, as they are very noisy. They are very easy to shoot, but it is hoped that sportsmen will not indulge in this form of "sport" unless driven to it owing to the meat supply of their caravan running short.

RHINOCEROS

Rhinoceros bicornis, Gmelin.

Somali name, *Wiyil*

DESCRIPTION.—This animal requires no description. It has been said that it is smaller than the East African variety, but this is possibly due to the poorness of its food supply during certain seasons of the year in Somaliland. The horns certainly seldom grow to any great length—20 in. for a front horn being well above the average.

MEASUREMENTS.—The following are the measurements of a male rhinoceros shot in the Ogaden country :

Length (straight)	10 ft. 8 in.
Height at shoulder	4 „ 6 „
Horns :	
Front horn (length)	19½ in.
„ (circumference)	21¾ „
Second horn (length)	9 „
„ (circumference)	21 „

DISTRIBUTION.—The rhinoceros is never seen north of Burao, owing to its extermination. Towards the Abyssinian border, in the Haud and Nogal Valley, they are still to be found, and are said to be plentiful in Ogadayn.

HABITS.—He inhabits broken country, whether stony or otherwise, and lives on the small stunted acacias, creepers, and small plants which abound in his natural habitat. Very short-sighted but endowed with a remarkable sense of smell, he can easily be approached with due precaution. After defecating, they generally scatter their excrement in all directions, probably with a view of obliterating their spoor. Unfortunately this strange beast is being driven before civilisation, and a few more years will see its disappearance from all save the most remote regions. The Somalis value the hide for their shields, and whip-handles are made of it.

SUB-ORDER—HYRACOIDEA

FAMILY—PROCAVIIDÆ

GENUS—PROCAVIA

P. brucei somalica

SUB-ORDER—PROBOSCIDEA

FAMILY—ELEPHANTIDÆ

GENUS—ELEPHAS

E. africanus orleansi

BRUCE'S DASSIE

Procavia brucei somalica, Thos.

Somali name, *Baune*

DESCRIPTION.—The general colour of the Somaliland dassie is a grizzled brownish grey, varying according to the age of the animals. The older specimens are lighter in colour. The hairs are brown at the base with a subterminal band of yellowish white and a terminal band of black, and are very delicate and soft. Underneath, and on the inner sides of the legs, the hairs are brown at their bases, and the terminal half white. All over the body, but more especially towards the hinder parts, there are long hairs, black in colour and varying in length from one to two inches, dotted about. The hairs on the inside of the ears are pure white, while those around the dorsal spot vary with the age of the animal. In the younger animals the bases of these hairs are the same colour as the bases of the hairs of the body, the terminal half being whitish, but later they become entirely yellowish white in the whole of their extent. The soles of the feet are quite black.

MEASUREMENTS.—The measurements in the flesh of the largest specimen obtained by me—a female—were as follows:

Head and body	450 mm.
Hindfoot	55 „
Ear	30 „

DISTRIBUTION.—This dassie is found throughout Northern Somaliland, wherever large rocks abound. I have not found it closer than thirty or forty miles from the coast except at Bihendula, where there are a few.

HABITS.—They live entirely among the large rocks and boulders bordering the dry river-beds and low rocky cliffs among

the foothills of the Golis Range. Their haunts are easily found owing to the masses of excrement which are piled in selected spots among the rocks. In Northern Somaliland they live side by side in perfect harmony with Speke's pectinator, which is known to the Somalis by the same name. When disturbed they keep up a continual "chirr-r-r." They travel over the rocks and cliffs with marvellous agility and are very inquisitive. The males are constantly fighting with each other, especially when there are a number of separate families living on the same cliff. They are entirely herbivorous, and can travel along the slender branches of the trees and run along the bare face of a rock with equal facility. They sleep during darkness and the heat of the day, doing their feeding during the three or four hours after sunrise and two or three before sunset.

THE ELEPHANT

Elephas africanus orleansi, Lyd.

Somali name, *marodi ;* Galla name, *Arba*

DESCRIPTION.—The Somali elephant has been given subspecific distinction * owing to the difference of its ears, which are said to be smaller than those of any of the other local varieties. It carries very small tusks seldom exceeding 30 lb. in weight, and is not worth the shooting. Fortunately it has now been strictly preserved, and it is hoped the small herds that yearly pass from Northern Somaliland to Abyssinia and back again will tend to increase in numbers.

MEASUREMENTS.—The largest specimen mentioned in Rowland Ward's "Records" taped 9 ft. 7¼ in. at the shoulder. The same book gives 60 lb. as the heaviest tusk from the Somali country.

DISTRIBUTION.—Formerly elephants used to come right down to the sea at Berbera, ranging over Guban, the Golis Range and Waggar Mountain, and thence northwards into the Gadabursi Hills and westwards through Hargeisa to the Abyssinian highlands. To-day they still wander round in the vicinity of Hargeisa, Jifa Medir and the Gadabursi Hills, where owing to the strict Game Laws they are unmolested. Farther south they are found in Western Ogaden.

HABITS.—Their habits in the Somali country are similar to elsewhere. They travel about in herds, leaving destruction in their wake. They are particularly fond of the succulent Armo creeper, a species of Vitis, which they rip from the trees, breaking the latter down. In the dry season they subsist largely on the Sansivieria, which is plentiful in most parts of the country. They express the juice and pulp between their massive molars, ejecting the fibre.

* *E. africanus orleansi.*

ORDER—RODENTIA

SUB-ORDER—SIMPLICIDENTATA

DIVISION—SCIUROMORPHA

FAMILY—SCIURIDÆ

GENUS—XERUS

X. rutilus dabagalla

THE GROUND SQUIRREL

Xerus rutilus dabagalla, Heugl.

Somali name, *Dabagalleh*

DESCRIPTION.—The general colour varies somewhat, according to the locality in which it is found, from a dull rufous brown to a bright rufous or tawny. In the maritime region they are very much duller and paler than in the interior, so much so that Mr. Thomas has given the one found in the Ogaden country subspecific rank. In the latter specimen the feet are rufous instead of whitish as in the present species. The tail is characteristic—it is flat in appearance with long hairs projecting from each side of it, arranged rather like a feather; it is rufous above and whitish below, while the hairs are annulated black or brown and white. The eyes are large and the ear merely consists of a narrow slit externally. Above and below the eye is a white patch, and also at the base of the ear.

MEASUREMENTS of adult specimens from the maritime plain and Odweina, about 100 miles south of Berbera:

	♂	
Locality	Odweina	Maritime plain
Head and body . . .	237 mm.	230 mm.
Tail	159 „	165 „
Hindfoot	50 „	54 „

DISTRIBUTION.—Everywhere except on stony ground. It is very common in most parts of the country where the soil is soft and it is able to burrow.

HABITS.—The burrows are usually made at the bases of the low-lying stunted acacias or in long-standing zarebas. The dabagalleh seldom strays far from its burrow, and in certain places

where there are old habitations, such as "coffee shops,"* they are met with in large numbers and are exceedingly tame, coming within a few feet of one. When startled they run for the nearest cover; they travel fast with their tail down and extended, but as soon as they come to a stop the tail is raised up over the back and they sit up on their haunches just outside their holes to make certain if there is any real danger before disappearing. They live entirely on roots, together with rice and "jowari" when it is to be found near at hand. They breed during March and April. The Somali name "Dabagalleh" means "the possessor of a tail like a sheath or scabbard."

* Which are found at frequent intervals along all the main caravan routes as they converge towards Berbera.

DIVISION—MYOMORPHA

FAMILY—MURIDÆ

SUBFAMILY—GERBILLINÆ

GENUS—GERBILLUS

G. sp?
G. dunni

GENUS—DIPODILLUS

D. sp?
D. sp?
D. peeli

GENUS—AMMODILLUS

A. imbellis

COAST GERBILLE

Gerbillus

Somali name, *Walo*

DESCRIPTION.—Only one specimen of this gerbille has so far been obtained, so it is impossible, until other specimens are procured, to decide whether or not it is entitled to subspecific rank. It is very pale in colour and similar to those found at Suakim and the Red Sea littoral. General colour pale fawn above white below; underfur above very pale French grey or slate. Fore and hind feet white. Tail long, dark above, white below; hairs towards extremity long and slender.

MEASUREMENTS in the flesh of the only specimen so far obtained are:

Head and body	118 mm.
Tail	144 „
Hindfoot	28 „
Ear	15 „

DISTRIBUTION.—Caught along the seashore at Berbera.

HABITS.—Lives in holes near the Somali huts near the town of Berbera. It is not easy to trap, although it is sometimes seen. The above specimen was hit with a stick while playing round a lamp placed on the ground.

DUNN'S GERBILLE

Somali name, *Walo*

Gerbillus dunni, Thos.

DESCRIPTION.—This gerbille was described by Thomas from a specimen obtained by Major Dunn at Gerlogubi Wells, south of the Haud, in the Ogaden country. It is very dark fawn above, white below, not sharply defined on sides. The hands and feet are white. Tail fawn at its proximal half, dark brown towards tip, where the hairs are long and delicate.

MEASUREMENTS of the only specimen so far obtained :

Head and body	90 mm.
Tail	120 „
Hindfoot	28 „
Ear	13 „

DISTRIBUTION.—The only specimen known is the above from Gerlogubi Wells.

HABITS.—Unknown.

DIPODILLUS

Somali name, *Walo*

DESCRIPTION.—This, another dipodillus obtained by me at Upper Sheikh, most nearly approaches *D. mackilligini*, but until other specimens are obtained it is difficult to decide. General colour drab, underfur slate, pinkish buff on sides. Underparts white ; hands and feet white. Tail dark above, white below ; black terminal brush.

MEASUREMENTS in the flesh were :

Head and body	84 mm.
Tail	108 „
Hindfoot	24 „
Ear	12 „

DISTRIBUTION.—Caught at Upper Sheikh.

HABITS.—Both the above specimens were caught by me inside my mess tent.

DIPODILLUS

Somali name, *Walo*

DESCRIPTION.—This dipodillus was caught by me at Burao, and although it appears to be very similar to *D. Watersi*, more specimens must be received before a final decision is made. The general colour is wood-brown, underfur slate, sharply defined laterally. White underneath, hands and feet white. The general colour above is not continued on to the arms. Tail dark above, white below. Supraorbital and postauricular white patches clearly marked.

MEASUREMENTS in the flesh of an adult male were:

Head and body	72 mm.
Tail	95 „
Hindfoot	18 „
Ear	11 „

DISTRIBUTION.—Only two specimens of this gerbille have so far been obtained. Both were caught by me at Burao.

HABITS.—Little is known of their habits, which seem to be similar to those of other gerbilles.

PEEL'S DIPODILLE

Dipodillus peeli, de Wint.

Somali name, *Walo*

DESCRIPTION.—This dipodillus was described by de Winton from a skull only. Two specimens from Upper Sheikh collected by me appear to agree as regards their skulls, but they cannot be described until other specimens of dipodilii are obtained from Aik, where Peel obtained his skull. I can hardly imagine two places so far removed from each other as Upper Sheikh and Aik, with quite distinct soils, would furnish the same species. The description of my specimens is as follows: medium-sized; fur wood-brown; underfur slate, white below; hands and feet white. Supraorbital and postauricular white patches well marked. Tail short, darker above than below, without terminal tuft.

MEASUREMENTS of an adult male:

Head and body	80 mm.
Tail	62 „
Hindfoot	18 „
Ear	12 „

DISTRIBUTION.—The above two specimens of mine were obtained at Upper Sheikh.

HABITS.—Similar to other gerbilles.

THE UNWARLIKE AMMODILLE

Ammodillus imbellis, de Wint.

Somali name, *Walo*

DESCRIPTION.—This little gerbille was first described by de Winton from a specimen collected by C. V. A. Peel at Gooder. The fur on back is reddish fawn, underfur dark slate, sharply defined on sides. Fore and hind feet, chin, cheeks and belly white; white supraorbital and postauricular spots well marked. Tail long and furnished at terminal third with long slender dark hairs.

MEASUREMENTS in the flesh were:

Head and body	106 mm.
Tail	144 „
Hindfoot	27 „
Ear	25 „

DISTRIBUTION.—Found in the Haud and Nogal Valley.

HABITS.—Nothing is known of the habits of this ammodille.

SUBFAMILY—MURINÆ

GENUS—MUS

M. brockmani

GENUS—ACOMYS

A. mullah

GENUS—ARVICANTHIS

A. somalicus

LONG-TAILED MOUSE

Mus brockmani, Thos.

Somali name, *Jir*

DESCRIPTION.—General colour fawn brown with a fair sprinkling of black hairs, chiefly along back, with dark slaty-coloured bases to the hairs. Underneath, the hairs are pure white throughout. Nose same as general body colour, but upper and lower lips white. Ears nearly naked. Fore and hind feet pure white. Tail about one-third longer than the head and body—tricoloured with longish dark hairs at end. Rings well marked, about 50 to the inch.

MEASUREMENTS of a large male killed at Upper Sheikh:

Head and body	123 mm.
Tail	184 „
Hindfoot	23 „
Ear	18 „

DISTRIBUTION.—I have only caught this rat at Upper Sheikh, but it is probably common all along the Golis Range.

HABITS.—This rat is invariably found among the rocks and stones in the nullahs at Sheikh, or on the plain not far distant from the stony hillside. It is nocturnal and carnivorous and comparatively common: the spinous and long-tailed mice being equally common among the rocks and in the ravines on the Golis Range.

THE SPINOUS MOUSE

Acomys mullah

Somali name, *Jir*

DESCRIPTION.—General colour buff above and white below. The hairs above are grey at their bases and tipped with buff. On the posterior half or third of the back only, the hairs are spinous. The reddish buff of the sides reaches as far as the wrists and ankles. The ears are covered with very minute hairs and are grey in colour: at their bases is a white patch both behind and in front; these, together with a small white patch under each eye, are more commonly seen in the older specimens. The hands and feet are like the belly, chest and underpart of neck, pure white. The tail, which is sparsely covered with minute hairs, is darker above than below. The muzzle, which is covered with very small white hairs, is markedly pointed. The skin of these rats is very delicate, rendering them extremely difficult to skin.

MEASUREMENTS in the flesh of a male and female specimen caught at Upper Sheikh:

	♂	♀
Head and body	121 mm.	95 mm.
Tail	105 „	87 „
Hindfoot	18 „	17 „
Ear	18 „	16 „

DISTRIBUTION.—Common in suitable localities in Northern Somaliland.

HABITS.—This mouse seems to prefer stony ravines to flat country. It lives in among the piles of stones marking the sites of old Galla graves, and on the rocky hillsides. It is common on the Golis Range. It is carnivorous and feeds both during the day and night. They are frequently found living together with other small rodents in the old white-anthills with their labyrinth of underground passages.

THE SOMALI FIBROUS RAT

Arvicanthis somalicus, Thos.

Somali name, *Jir*

DESCRIPTION.—The general colour above is light brown with a considerable sprinkling of black hairs, giving the fur a dark streaky appearance. The underfur above is shiny black, and on the belly slate colour. The terminal portions of the hair on the belly are white, giving a silver-grey appearance in that part. The ears are small, round and sparsely covered with hair. The tail is covered with dark hairs above and white below. Hands and feet are thinly covered with short light brown hairs. Throughout the coat long black hairs with pale brown terminal portions are distributed, giving the whole a shaggy appearance.

MEASUREMENTS of a male and female specimen, taken in the flesh, were :

	♂	♀
Head and body . . .	120 mm.	110 mm.
Tail	94 „	84 „
Hindfoot	25 „	21 „
Ear	15 „	14 „

DISTRIBUTION.—Common throughout Somaliland in suitable localities.

HABITS.—Fibrous rats are invariably found near old-standing camps. Throughout the day they can be seen running in and out of the thorn zarebas, under which they have their runs and nests in the thick undergrowth. They are very common, and will devour anything. I have never caught them at night, so presume they only feed during the daytime. At daybreak I have caught as many as three at one time in the small " break-back " trap.

SUB-FAMILY—LOPHIOMYINÆ

GENUS—LOPHIOMYS

L. smithii

SMITH'S GREAT AFRICAN CRESTED RAT

GREAT AFRICAN CRESTED RAT

Lophiomys smithii, Rhoads

Somali name, *Yaidado*

DESCRIPTION.—The general appearance of this animal is not very much like a rat; the head is rather like that of a guinea-pig, while the body is not unlike a small porcupine's, when viewed from a distance, hence the Somali name. Some Somalis, however, call it "Hor," regarding it as the young of the grey-backed ratel. The general colour appears to be silver grey until the crest is erected, when distinct longitudinal bands of black are seen. The crest is banded black and silver grey for the whole of its length; at the base of the hairs of the crest on each side in the male is a distinct longitudinal bare patch* stretching from the neck to about the end of the ribs, and immediately below this is a long band of about the same length, of very coarse dull brown hair—this coarse band of hair is very plain even in the young. The crest extends the whole length of the body and along the greater part of the tail—the tip of the latter being white. In the young animal the tail is black with a white tip. The underparts vary from grey to almost black. The four feet are jet black. The forehead, with the exception of a narrow band of black down the middle line, is pure white—this narrow black band is continuous with the nose-band. The remainder of the face is quite black, as also are the chest and throat. The palms of the hands and the soles of the feet are white and hairless.

MEASUREMENTS.—The measurements of an adult male specimen, which was alive, were as follows:

Head and body	11 in.
Tail	8 „

* This bare patch was absent in my specimens caught at Burao, both in the female and the young male.

DISTRIBUTION.—Found probably throughout the Somali country, but undoubtedly a very rare animal. I have seen it at Sheikh and near Burao, but never lower than 4,000 ft. One specimen was killed by Somalis at Upper Sheikh and one caught alive, while an adult female and young male were caught near Burao and were kept by me in captivity for some months, only to escape by eating their way out of a substantial deal box on board the steamer on their way to the Zoological Gardens. To keep them in captivity it is necessary to have a zinc-lined case as a cage. The first specimen was obtained by Dr. Donaldson Smith in Western Somaliland.

HABITS.—This fine rat is nocturnal in its habits, leaving its burrow or hole among the rocks about sundown in search of food, which is almost entirely vegetable. In captivity it will eat meat, bread and maize, but prefers lettuce, beetroot and other vegetables. It requires little or no water. Its mode of progression is very similar to that of a hedgehog, and it makes a noise, when irritated, not unlike that animal. The noise is peculiar,—one or two hisses or snorts followed by a kind of growl. It is easy to tame. Owing to the slowness with which it moves along it is easy to capture. It usually proceeds with its crest erect, presumably to frighten jackals and other enemies. It can do little harm save with its teeth, its claws being of little use except for scraping in the soil for roots and bulbs. When eating it seizes its food between its two forefeet while it sits on its haunches, nibbling it after the manner of squirrels. Its custom of proceeding with crest erect is in all probability a protective measure to frighten its enemies, which might mistake it very easily for a young porcupine.

FAMILY—BATHYERGIDÆ

GENUS—HETEROCEPHALUS

H. glaber

THE NAKED RAT

Heterocephalus glaber, Rüpp.

Somali name, *Faranfat*

DESCRIPTION.—This quaint little creature is only sparsely covered with hair over the body and tail. In point of fact, the few hairs on it are hardly worthy of notice. The eyes are about the size of pins' heads, and the external ear consists of a fold of cartilage of oval shape surrounding the external meatus. The head is large in comparison with the rest of the body. The skin covering the body is very loose, and can easily be peeled off.

MEASUREMENTS in the flesh of a female were:

Head and body	92 mm.
Tail	41 „
Ear	2 „
Hindfoot	21 „

DISTRIBUTION.—The naked rat, curiously enough, is found in the coldest parts of Somaliland. It is common on the Golis Range, and from there right away to Hargeisa and south into the Haud. I have caught it as far south as Banissa, Gurre country, British East Africa.

HABITS.—This peculiar rat lives in burrows under the ground. These burrows extend for great distances and have exits at intervals, through which the mud dug out during the burrowing is shot out in jets. These small tumuli look like miniature volcanoes when the earth is being shot out of them. The best way to get specimens is to creep up softly to one of these "active volcanoes," when one can often see the hindlegs hard at work shooting out the mud. A good stout stick with a nail at the end or a small Somali spear can then be thrust in rapidly and the rat transfixed.

FAMILY—JACULIDÆ

GENUS—JACULUS

Jaculus?

JERBOA

Jaculus

Somali name, *Walo*

DESCRIPTION.—This jerboa is smaller than *J. gordoni* and somewhat paler in colour. The most marked characteristic about the fur is the presence of a well-marked postauricular white patch. Not till other specimens are obtained, however, will it be possible to differentiate between this specimen from Berbera and the Soudan one, *J. gordoni.*

MEASUREMENTS of an adult male caught near the town of Berbera :

Head and body	110 mm.
Tail	170 „
Hindfoot	19 „
Ear	23 „

DISTRIBUTION.—The jerboa described above comes from the coast, but two other specimens which may prove to be similar were obtained by me at Upper Sheikh and Ber.

HABITS.—The jerboas make delightful pets, and are not difficult to rear in captivity. They are nocturnal in their habits and chiefly graminivorous.

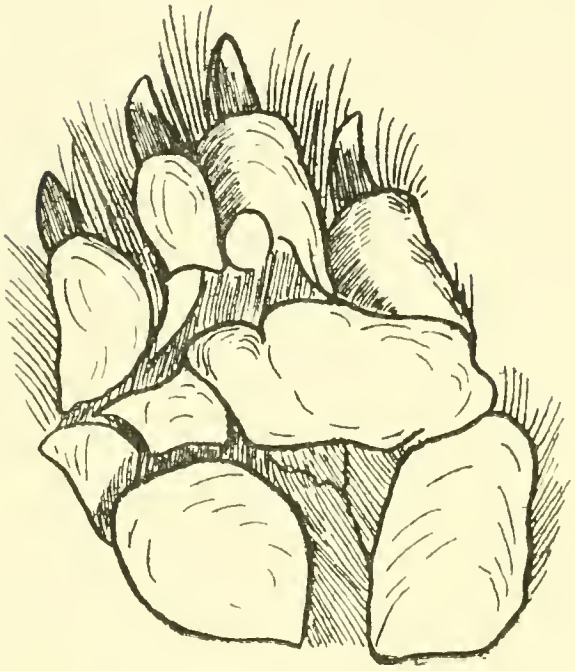
DIVISION—HYSTRICOMORPHA

FAMILY—HYSTRICIDÆ

GENUS—HYSTRIX

H. cristata

PORCUPINE
(Adult ♂)



SOLE: FORE FOOT, LEFT SIDE (EXACT SIZE)

SOLE: HIND FOOT, LEFT SIDE (EXACT SIZE)

THE PORCUPINE

Hystrix cristata, Linn.

Somali name, *Ano gūb*

DESCRIPTION.—The Somali porcupine belongs to the North African species. The general colour is black, only the true quills being banded black and white. The head and legs are covered with coarse bristles. The tail is peculiar. The quills with which it is furnished are hollow and have the appearance of having been cut off short; these hollow quills are usually white. As the accompanying diagrams show, the front foot is only furnished with four toes, while the hind has five. The breasts, in the female, of which there are two pairs, are situated laterally.

MEASUREMENTS of an adult male, taken in the flesh, were as follows:

Length of head, body and tail	880 mm.	or 34 in.
Round body	500 „	„ 19¾ „
Length of sole of forefoot	57 „	„ 2¼ „
„ „ „ hindfoot	90 „	„ 3½ „
Weight	25 lb.	

The weight of a female killed the same day was 32 lb.

DISTRIBUTION.—The porcupine is found all over Somaliland, but being nocturnal in its habits is seldom seen.

HABITS.—Porcupines are nocturnal animals, and spend the day in holes in the ground. They are usually seen singly or in pairs, or a pair accompanied by a small family of two or three young ones. Almost entirely vegetarian as regards their diet, they are a great nuisance to gardeners—doing in one night a great deal of damage. When startled or annoyed they make a peculiar

whirring noise, which is made by rapidly vibrating the hollow quills at the end of the tail. On one occasion I found two adult and two young porcupines enjoying a siesta under a shady bush close to a large hole. On disturbing them they made for the hole, when I wounded the female, who was the last to enter. As they were near the surface I endeavoured to drag out the female, who was the nearest, but before I succeeded in getting her out, the male had eaten away nearly the whole of one of her buttocks. I eventually succeeded in securing all four of them.

FAMILY—CTENODACTYLIDÆ

GENUS—PECTINATOR

P. spekei

SPEKE'S PECTINATOR

Pectinator spekei, Blyth

Somali name, *Baune*

DESCRIPTION.—Fawn or fawn-grey above with fur tipped with black. Fur on belly, chest and chin white or creamy; underfur slate, darker above than below. Tail bushy; hairs, basal half pale fawn, terminal half dark brown, with other hairs white at their terminal half. Apparently specimens obtained near the coast and those at an altitude of 6,000 ft. on Wagar Mountain differ but slightly in colour and thickness of fur.

MEASUREMENTS in the flesh of an adult male killed on Wagar Mountain were as follows:

Head and body	170 mm.
Tail.	49 „
Hindfoot.	33 „
Ear	21 „

DISTRIBUTION.—Found throughout the coast districts and as far as 100 miles inland, irrespective of altitude.

HABITS.—This little mammal is generally found in company with the dassies, living on the best of terms with its tailless friend, and adopting very similar habits. It feeds at daybreak and an hour or so before sundown. It is invariably found in rocky country, especially on the rocky cliffs bordering some of the river-beds in Somaliland, where the numerous crevices and holes in the rocks afford ample shelter.

SUB-ORDER—DUPLICIDENTATA

FAMILY—LEPORIDÆ

GENUS—LEPUS

L. somalensis

THE SOMALI HARE

Lepus somalensis, Heugl.

Somali name, *Bakaïleh*

DESCRIPTION.—The general colour of the Somali hare (as far as is known only one species exists) is grey and black above, hair very soft and silky, silver grey at base, then yellowish with black tips. On the sides it is lighter grey fading into fawn, with underparts pure white and quite woolly. Legs, according to the locality in which the animal is found, vary from an earthy brown to a reddish colour; the latter being the case in the specimens shot in the Haud, where the soil is red. The tail is black above, white below. Occipital portion of head and upper part of neck cinnamon or pale rufous.

MEASUREMENTS taken in the flesh of two adult specimens, male and female, were as follows:

	♂	♀
Head and body	$20\frac{3}{16}$ in.	$19\frac{3}{4}$ in.
Tail	$3\frac{3}{8}$ „	$3\frac{1}{2}$ „
Height at shoulder	11 „	10 „
Ear	$4\frac{5}{8}$ „	$4\frac{3}{8}$ „
Weight	5 lb.	not taken

DENTITION.—*i.* $\frac{2}{1}$, *c.* $\frac{0}{0}$, *pm.* $\frac{3}{2}$, *m.* $\frac{3}{3}$.

DISTRIBUTION.—Throughout Somaliland from the maritime region to the waterless Haud.

HABITS.—Always found singly. It spends the heat of the day in its lair underneath a bush, and never goes down holes. When surprised it runs a short way and then sits listening, and if disturbed a second time will run a great distance, covering the ground at a great pace by leaping along. They are very easily killed, the smallest shot being sufficient to bag them. They are entirely graminivorous and nocturnal in their habits.

ORDER—CHIROPTERA

SUB-ORDER—MICROCHIROPTERA

FAMILY—NYCTERIDÆ

GENUS—PETALIA

P. thebaica

FAMILY—VESPERTILIONIDÆ

GENUS—VESPERTILIO

V. minutus somalicus

GENUS—SCOTOPHILUS

S. schlieffeni
S. nigrita leucogaster

FAMILY—EMBALLONURIDÆ

GENUS—NYCTINOMUS

N. pussilus

GENUS—CARDIODERMA

C. cor

SLIT-FACED BAT

Petalia thebaica, Geoff.

Somali name, *Fidmer*

DESCRIPTION.—General colour above, smoky-grey, lighter below. Ears large and bluntly pointed, practically hairless, with a fringe of pale hairs along inner margin, becoming shorter in length or disappearing as the tip is reached.

MEASUREMENTS of female specimen caught at Upper Sheikh :

Head and body	77 mm.
Tail	57 „
Hindfoot	90 „
Ear	36 „

DISTRIBUTION.—Found all over the interior plateau and on certain parts of Guban.

HABITS.—They spend the day in caves, old disused wells as found at Ber, and in holes in trees, emerging at dusk. They are gregarious in their habits, sometimes hundreds being congregated together in the same well.

Vespertilio minutus somalicus, Thos.

Somali name, *Fidmer*

DESCRIPTION.—This is a very small bat; the general colour above being wood-brown, while the underparts are whitish. The underfur all over is black. *V. minutus* was obtained in Southern Somaliland by Capt. Bottego.

MEASUREMENTS in the flesh of a specimen from Hargeisa are:

Head and body	44 mm.
Tail	35 „
Hindfoot	5 „
Ear	9 „

DISTRIBUTION.—Northern Somaliland, Hargeisa.

HABITS.—Little or nothing is known of the habits of this bat.

SCHLIEFFEN'S BAT

Scotophilus schlieffeni, Pet.

Somali name, *Fidmer*

DESCRIPTION.—This little bat is a smoky-brown colour.

MEASUREMENTS of a male specimen in the flesh :

Head and body	48 mm.
Tail	27 „
Hindfoot	6 „
Ear	11 „

DISTRIBUTION.—This is a common Arabian species, but is only found in Berbera in Somaliland, probably having been imported in the hold of some ship. When the above specimen was caught there were several flying about.

HABITS.—An insectivorous bat with habits similar to other insect-eating species.

Scotophilus nigrita leucogaster

Somali name, *Fidmer*

DESCRIPTION.—This bat, which is olive-brown above and yellowish brown below, has been caught in the north-west of Somaliland towards the Harrar Plateau.

MEASUREMENTS in the flesh of an adult female specimen in the British Museum are as follows:

Head and body	70 mm.
Tail	48 „
Hindfoot	10 „
Ear	16 „

DISTRIBUTION.—Hargeisa to Harrar in North-west Somaliland. It has also been obtained in Italian Somaliland at Brava.

HABITS.—Similar to other members of same genus.

Nyctinomus pussilus, Cretzschm.

Somali name, *Fidmer*

DESCRIPTION.—This bat is smoky-brown all over, but considerably darker above than below.

MEASUREMENTS.—I have been unable to get the measurements of this bat.

DISTRIBUTION.—Caught by Captain Bottego at Brava, in Italian Somaliland.

HABITS.—Not known, but probably similar to others of the same genus.

HORSE-SHOE BAT

Cardioderma cor, Pet.

Somali name, *Fidmer*

DESCRIPTION.—The colour of this bat is above, french grey below, silver grey and a pale creamy buff colour at the bases of the ears. The ears, which are practically hairless, are joined to each other by a bridge of skin, and the tragus is markedly elongated. The external portion of the nose is formed by a peculiar flap or leaf of flesh colour.

MEASUREMENTS taken in the flesh from a male specimen:

Head and body	86 mm.
Tail	—
Hindfoot	15 „
Ear	46 „

DISTRIBUTION.—I have only obtained this bat at Ber, 18 miles east of Burao, where I found hundreds of them in an old disused well.

HABITS.—Similar to other bats.

ORDER—INSECTIVORA

FAMILY—MACROSCELIDIDÆ

GENUS—MACROSCELIDES

M. revoilii

GENUS—ELEPHANTULUS

E. somalicus

FAMILY—ERINACEIDÆ

GENUS—ERINACEUS

E. æthiopicus
E. albiventer

FAMILY—SORICIDÆ

GENUS—CROCIDURA

C. nana
C. somalica
C. smithii
C. sp. ?

REVOIL'S ELEPHANT SHREW

Macroscelides revoilii, Huet.

Somali name, *Walo*

DESCRIPTION.—The general colour of Revoil's shrew is greyish brown above and on sides, while the chin, throat, chest, belly, hands and feet are white. The white palpebral patches are quite distinct. Underfur is slate. Hairs of tail dark brown and white, getting longer towards tip of tail, where they form a small brush.

MEASUREMENTS of a male specimen obtained by me at Barkasan, at the foot of the Golis Range, 45 miles south-west of Berbera, were :

Head and body	118 mm.
Tail	140 „
Hindfoot	37 „
Ear	25 „

DISTRIBUTION.—Northern Somaliland.

HABITS.—These shrews are to be often seen along the tracks in the daytime, especially in stony localities. They move with lightning-like rapidity and stop suddenly. They sit, stooping forwards ready to spring off at a moment's notice, twitching their truncated noses. They are diurnal, and their burrows are usually at the root of some low-lying stunted acacia or in a heap of stones such as an old Galla grave.

SOMALI ELEPHANT SHREW

Elephantulus somalicus, Thos.

Somali name, *Walo*

DESCRIPTION.—The general colour of this truncated shrew varies according to locality, those specimens from Ogo being considerably darker in colour than those from Ogo-Guban and Guban. The general colour of a typical specimen from Ogo-Guban is reddish fawn above, paler on sides, with chin, throat, belly, hands and feet white. Underfur is slate. White palpebral patches well marked. Tail darker above than below. No sign of a tuft towards tip.

MEASUREMENTS of an adult male from Burao are:

Head and body	111 mm.
Tail	126 „
Hindfoot	31 „
Ear	23 „

DISTRIBUTION.—Found in northern parts of British Somaliland within 100 miles of the coast.

HABITS.—This shrew is similar in habits to *M. revoilii*; it always frequents more or less stony sites, living in holes in the ground or in among piles of rocks and stones. I have found it living amicably together with Bruce's dassie and Speke's pectinator.

THE HEDGEHOG

Erinaceus æthiopicus, Hempr. and Ehr.

Somali name, *Hedig*

DESCRIPTION.—This hedgehog looks very much like the European hedgehog. From the nape of the neck to the tail the body is completely covered with short sharp spines which are banded black and white. The muzzle and head are black except for a broad white frontal band which passes right round the head like a collar. The four feet are black.

MEASUREMENTS in the flesh of a male and a female specimen captured on the maritime plain were as follows:

	♂	♀
Head and body	212 mm.	215 mm.
Tail	20 „	20 „
Hindfoot	28 „	27 „
Ear	24 „	23 „

DISTRIBUTION.—This little hedgehog is very common on the maritime plain, and more or less common all over Somaliland.

HABITS.—Similar to all other hedgehogs. When attacked it rolls itself into a ball and makes a peculiar noise, not unlike the throbbing of a miniature engine. Periodically it gives vent to a sort of half grunt, half bark sound. Its diet is probably wholly insectivorous, although it is frequently found in gardens. The Somalis are rather superstitious about hedgehogs, never killing or injuring them, as they consider they are stars which have fallen from the heavens, hence the vernacular name "Hedig," which means "a star."

THE WHITE-BELLIED HEDGEHOG

Erinaceus albiventer, Wagn.

Somali name, *Hedig*

DESCRIPTION.—This pretty little hedgehog is like the foregoing species, except that the whole head and underparts are pure white. It also has rather more hair than it, owing to its living in a colder climate.

MEASUREMENTS of a male specimen taken in the flesh were :

Head and body	263 mm.
Tail	14 „
Ear	27 „
Hindfoot	27 „

DISTRIBUTION.—I have only seen this hedgehog at Sheikh (4,500 ft.), where it is not uncommon.

HABITS.—Similar to the last species.

THE LITTLE SHREW

Crocidura nana, Dobs.

Somali name, *Jir*

DESCRIPTION.—This is by far the smallest of the Somali shrews. It was first discovered by the brothers James and described by Dobson, whose description of the type specimen is: "Fur above slate brown, with faint greyish tinge; beneath white—the colour of the upper separated from that of the lower surface by a sharp line. The feet are clothed with short shining whitish hairs. The tail with short brownish hairs, with many long fine dark brown hairs projecting almost to the tip. Ears moderate, clothed with short dark brown hair."

MEASUREMENTS of the type specimen—distorted skin from Dollo—are:

Head and body	about 40 mm.
Tail	30 „
Hindfoot	8·5 „

Two other specimens obtained by C. V. A. Peel at Aik measured, as skins:

Head and body	52 mm.	52 mm.
Tail	35 „	37 „
Hindfoot	8 „	8 „

DISTRIBUTION.—Found probably throughout the Somali country at an altitude of 4,500 ft., *i.e.* in the Haud, Nogal Valley and Ogaden country.

HABITS.—Nothing is known about the habits of this shrew.

THE SOMALI SHREW

Crocidura somalica, Thos.

Somali name, *Jir*

DESCRIPTION.—This shrew was first described by Thomas from a specimen collected near the Webi Shebeleh by Col. A. Paget. The description of the type specimen was as follows: "Size small, form slender. General colour above slaty-grey, more or less variegated with brown. Belly clear grey, chin white. Ears whitish, very finely haired. Hands and feet white. Tail fairly long, slender, not markedly incrassated, but yet thicker at its base, whence it evenly tapers to its tip—pale brown above, white below, the bristles white."

MEASUREMENTS of the above specimen in spirit were:

Head and body	53	mm.
Tail	39	„
Hindfoot	11·2	„
Forearm and hand	15·6	„

DISTRIBUTION.—The only specimen, the one described, came from the Webi Shebeleh.

HABITS.—Same as other members of same genus.

SMITH'S SHREW

Crocidura smithii, Thos.

Somali name, *Jir*

DESCRIPTION.—This shrew was discovered by Dr. Donaldson Smith and described by Mr. Oldfield Thomas as follows:—"Face, crown, and back pale slaty-grey—lips, cheeks, chin, chest, sides and belly white, as are also the whole of the limbs. Ears short, almost naked, their few fine hairs brown. Lateral glands distinct (in male), the hairs above and below them stained rufous in the type. Tail barely half the length of the head and body, thick, tapering, rather thinly haired, pure white throughout."

MEASUREMENTS of the above, an adult male, in spirit:

Head and body	64	mm.
Tail	31	„
Hindfoot	11	„
Ear	7·5	„
Forearm and hand	15·6	„

DISTRIBUTION.—The above specimen was caught near the Webi Shebeleh.

HABITS.—As in other shrews.

Crocidura Sp.?

Somali name, *Jir*

DESCRIPTION.—This shrew, which is probably distinct from the foregoing species, was caught by me within 30 miles of the coast, and as it appears to be very much paler in colour will probably turn out to be a new species, which can only be decided when further specimens are procured. General colour pale fawn-grey above, underparts whitish. Lateral glands well marked—hairs above and below rufous. Fore and hind feet sparsely covered with delicate white hairs. Tail thinly covered with short and long delicate white hairs.

MEASUREMENTS in the flesh of an adult male:

Head and body	65	mm.
Tail	56·2	„
Hindfoot	12·5	„
Ear	10	„

The tail of this species is very much longer than *C. smithii*, which it seems to resemble in other respects.

DISTRIBUTION.—Foothills of Golis Range. Caught at Goton, near Armaleh.

HABITS.—Same as other shrews.

ORDER—EDENTATA

FAMILY—ORYCTEROPODIDÆ

GENUS—ORYCTEROPUS

O. æthiopicus

ANTBEAR

THE ANTBEAR

Orycteropus æthiopicus, Sund.

Somali name, *Kharendi*

DESCRIPTION.—The skin of the antbear is moderately well covered with hair, but, owing to its constant habit of burrowing, save on the backs of the hands and feet it is worn down to mere bristles. In point of fact, wherever there is a part exposed to friction there the hair is short and bristly. The tongue from root to tip is about 12 in. in length. The bristles on the hands and feet are coarse and usually black in colour.

MEASUREMENTS in the flesh of male and female specimens :

	♂	♀
Head and body	39 in.	40 in.
Tail	22 „	24 „
Hindfoot	$8\frac{3}{8}$ „	8 „
Ear (anterior)	$6\frac{3}{4}$ „	$6\frac{1}{2}$ „
„ (posterior)	$7\frac{1}{4}$ „	7 „
Length of foreclaws . . .	$1\frac{3}{4}$ „	—
Girth of root of tail . . .	$16\frac{1}{2}$ „	—
Weight	98 lb.	—

DISTRIBUTION.—Throughout the Somali country except in the coast districts—most plentiful in the Haud.

HABITS.—The antbear is purely nocturnal in its habits, usually emerging from its burrow a little before sundown. The rapidity at which it digs is truly wonderful. On reaching a likely spot it presses its flat snout on the earth and smells around. It then starts digging and proceeds with great rapidity. Its forefeet, armed with formidable claws, scrape back the soil under its body while it

rests on its two hindfeet and its tail. As soon as there is a good accumulation of earth under it, it ceases to dig, and, resting on its forefeet in front and its tail behind, it shoots out the earth with its hindfeet. In this manner it very soon digs itself beneath the surface and is lost to sight. If a rope be tied to its hindlegs and it be allowed to return to its burrow, no power can drag it forth against its will. It lives entirely on termites.

ANTBEAR AT WORK

APPENDIX I

A LIST of the Somali, Galla, and Abyssinian names for most of the game animals in Somaliland and the adjacent countries.

ENGLISH.	SOMALI.	GALLA.	ABYSSINIAN.
Game.	*Ugad.*	*Binaissa.*	*Owri.*
Greater Kudu	Godir	Gadamsa	Agaza
Lesser „	Godir arreh		
Oryx	Be'id	Sala	Sala
Hartebeest	Sig	Korkai	Korkai
Waller's gazelle	Gerenuk	Gufutu	Gufutu
Clarke's „	Dibatag	——	——
Sœmmering's „	Aoul	Iddi	Yaimyada fi'il
Speke's „	Dhero	——	——
Pelzeln's „			
Dik-dik	Sagaro	Adallo	Ainshu
Waterbuck	Balengo	Warabo	Warabo
Bushbuck	Decula	Decula	Decula
Reedbuck	——	Kurubu	——
Klipspringer	Alikut	——	——
Beira	Beira	——	——
Oribi	——	Dalo	Maida fi'il
Lion	Libah	Laincha	Ambassa
Leopard	Shebel	Karainsa	Nabbar
Hyæna	Waraba	Warabaissa	Jib
Jackal	Dawa'o	Jedalla *or* Yeiyei	Kabaro
Cheetah	Harimat	——	——
Elephant	Marodi	Arba	Zuhun
Rhinoceros	Wiyil	Birjec	Owrari
Hippopotamus	Hawas *or* Jehas	Robi	Gumari
Warthog	Dofar	Golja	Rea
Wild donkey	Gumburi	——	——
Zebra	Faro	Faraicha *or* Haradido	Maidakiya
Buffalo	Gessi	Gaffars	Gosh
Giraffe	Gerri	Sattawa	Kachinye
Ostrich	Ghoraiyo	Guchi	Sagwono

APPENDIX II

HINTS ON REMOVING AND PREPARING SKINS OF MAMMALS

SECTION A.—LARGE MAMMALS

SPORTSMEN are, as a rule, by no means careful enough about the proper labelling of their specimens, which consequently lose much of their scientific value. Large Mammals, like small ones, should be carefully labelled, with all particulars of date, sex, locality, altitude, etc. Specimen-labels are shown beyond (page 181). The proper reference of each skull to its own particular skin is also of much importance.

For skinning large Mammals the implements required are very few and inexpensive—a shoemaker's knife, a scalpel, a small saw, and a pair of pliers, with perhaps the addition of a pair of cutting-pincers, being all that are requisite. Any addition to this simple outfit only tends to encumber the traveller unnecessarily, everything really depending upon the skill with which the knife is wielded rather than upon the number and nature of the implements themselves.

The great principle the operator should bear in mind is to make as few incisions as possible in the skin, and that these, so far as practicable, should be confined to the middle line of the under surface of the body, and to the inner sides of the limbs. If this be attended to, the slits will be but little conspicuous when the specimens are mounted. In Mohammedan countries the natives have a practice of cutting the throats of animals from ear to ear immediately they fall, in order that they may be bled after the orthodox fashion. Such gashes have, of course, to be sewn up when the specimen is mounted, with the result that the region of the throat is disfigured by ugly seams. In his book entitled "Seventeen Trips to Somaliland," Major Swayne has shown that by a little gentle persuasion the natives can be induced to so modify the *halal* (as the operation is called) that the damage to the specimen is reduced to a minimum; and probably a similar modification might be assented to by the Mohammedans of other countries.

In the case of hornless animals, such as a lion or tiger, preparatory to commencing operations, the carcase about to be skinned should be turned on its back, and the fore and hind limbs held outwards by assistants, as far as they can be easily stretched. The operator should then make a straight incision with the knife from the chin along the middle line of the under surface of the body to the tip of the tail. In making this and the other incisions great care should be taken to avoid cutting more than possible into the flesh, and, above all, not to lay open the cavity of the abdomen. The next procedure is to make cuts diverging from the main incision, in order to enable the limbs to be stripped. In the case of the fore legs the lateral cuts should be carried from the middle line through the armpits down the inner side of each limb, the knife being held pointing somewhat outwardly, in order that the seams made in sewing up the cuts should be as inconspicuous as possible in the mounted specimens. In the hind limbs the incisions should be carried through the groin, and so downwards in the same manner as in the fore limbs.

In the case of horned animals (exclusive of rhinoceroses, in which the horns are removed with the skin) it will be necessary, when the carcase is again turned, to make an incision from the crown of the head down the middle line of the neck to such a distance as will admit of the horns or antlers being passed through the slit thus made when the skin is removed from the head. In no case should the head-skin be severed from that of the body.

When all the above-mentioned cuts have been made, the skin of the chest will be left in the form of lappets. Commencing by the application of the knife to the point of one of these lappets, the skin should be gradually stripped from the body, tail, and limbs, special care and attention being requisite in order to avoid damaging the feet, of which the natural contour should be so far as possible preserved. In the case of the smaller specimens, whether deer, antelopes, carnivora, or monkeys, the terminal toe-bones may be left in the skin ; but their complete removal is desirable in the larger representatives of these groups, as well as in still bigger animals, such as elephants, hippopotami, and rhinoceroses. Special measures have to be taken with the three latter, but in the case of carnivora and monkeys the skin of the toes should be drawn over them by turning it inside-out, and the joints cut with the pliers where required.

The next process is to turn over the carcase and draw the skin forwards over the head, when the separation of the ears and the severance of the closely adherent skin round the eyes will demand somewhat delicate manipulation. The conchs of the ears should be severed close to the skull, in order to avoid forming apertures of too large size in the skin ; and in the case of the eyelids particular care should be taken in order to avoid

gashing the skin, since even the smallest slit in this region will tend to spread to a great extent, and thus cause almost irreparable injury to the specimen. The lips should be cut off as close as possible to the gums.

It may be added that in the case of animals of the approximate size of a fox, the skin of the tail may be stripped off entire, without slitting the under surface; but for animals of this size not intended for mounting, see page 184.

Having now removed the skin from the carcase, the next process is to cut away completely all fragments of flesh and fat which may have been left adhering to its inner surface. The cartilages of the ears must also be dissected out with the scalpel, by turning back the skin over them; after which the inner surface should be well anointed with some preservative—powder, paste or liquid. The scalpel must also be passed between the outer skin and the inner mucous lining of the lips, and the slit thus made well dressed with the same substance. The eyelids have likewise to be thoroughly dressed with preservative; and if necessary, on account of their thickness, they should be slit open with the scalpel from the inside.

The skin has now to be dried, which may be effected, if that of a large animal, either by pegging it out (without undue stretching), hair downwards on the ground, or by folding and drying it in such a manner that large creases should not be formed. Smaller skins should always be folded and dried without creasing. Some preservative, such as alum, or one of the special preparations sold for the purpose by dealers, should now be well rubbed in, especially on the ears, mouth, feet, etc., and the whole specimen sprinkled with the same. The hairy side of the skin has next to be well anointed with turpentine, and the specimen will be ready for packing. When skins are shot during the rainy season, they are very difficult to get dried, and it is then recommended that, if possible, they should be pickled in brine.

In addition to the skin, it is essential that the skull, and, if possible, the bones of the limbs, should be preserved as complete as possible. The flesh should be carefully cut away, the brain taken out through the natural hole at the back, and the bones soaked for a few hours in water, after which they may be dried in the sun. In hot, dry climates the teeth should be coated with wax in order to prevent their splitting. A wash of turpentine over the skulls and other bones will prevent the ravages of insects.

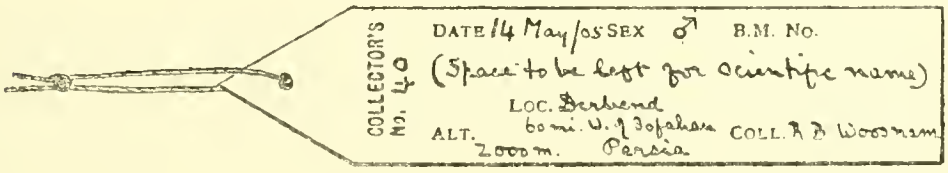
SECTION B.—SMALL MAMMALS

1.—With the freshly killed carcase before you, write the label. This should bear on the front a current number, the date, sex, locality,

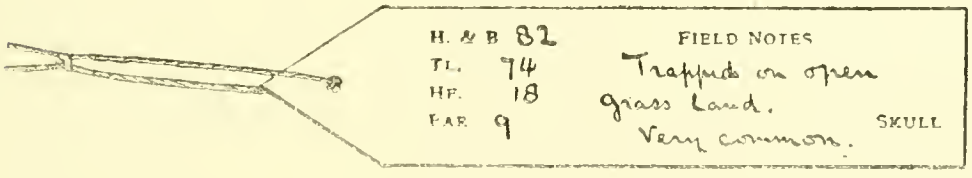
altitude above sea (in metres or feet), and your signature; on the back the following measurements in millimetres, taken in the flesh: (1) length of head and body; (2) of tail without end hairs; (3) hind foot without claws; and (4) ear, from notch at base to tip. In the case of the first two measurements, the body should be straightened out as much as possible, and the tail bent upwards at a sharp angle, and the measurements should then be taken from a point in the angle (see illustrations on page 183). The label should also have on its back any notes that may strike you about the habits of the animal, its native name, or the character of the locality.

EXAMPLE OF LABEL

FRONT



BACK



It is important that the positions of the different items, the method of writing dates, and the direction of the writing (away from the thread) should be exactly as in the example, so that skins from different sources may all be similarly labelled.

2.—Open the skin by cutting up the belly from the anus to the hinder end of the breast-bone; first push one and then the other knee through the opening, and cut through the legs at the knee-joints, leaving in the shin-bones; clear off the chief muscles of the leg-bones, and separate the skin from the body all round the tail; then, holding the skin at the base of the tail firmly between the finger- and the thumb-nails, or in the fork of a cleft stick, pull over the vertebræ from inside with the forceps; then, gradually turning the skin inside-out, skin it up over the body, shoulders, and head, separating the fore limbs at the elbow-joint, and taking great care not to cut it in passing over the eyes; skin it entirely off over the mouth, cutting carefully round the lips. Throughout the operation plenty of fine sawdust will be

found of great assistance in keeping the hands, and consequently the fur, dry and unsoiled.

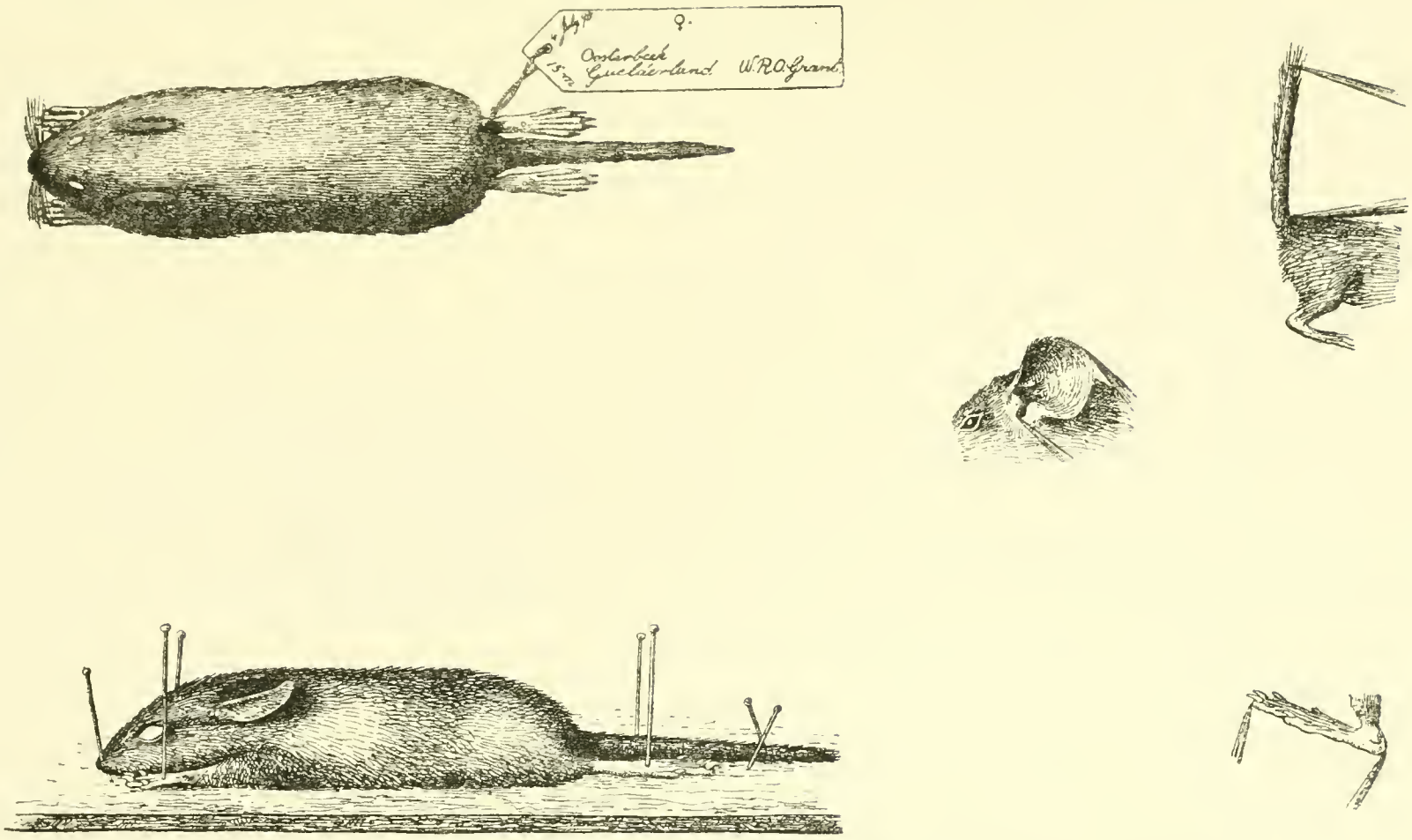
3.—Clean with sawdust the inside of the skin from blood, fat, etc., and then brush it all over with arsenical soap, being especially careful that the insides of the limbs get some put on them. Do not put any poison, especially powdered arsenic, on the outer furry side of the skins. But pepper, naphthaline, or camphor may be used to keep off moths from the skin when travelling.

4.—Turn the skin back right side out, and fill the cavity of the body with cotton-wool, putting it in as far as possible in one piece. Or the skin may be reversed over the wool by putting the forceps up the furry side of the skin from the tail-end, and grasping the wool body through the mouth. Take care just to fill out the skin without over-stretching it, and try to get all your skins filled out to about the same degree. Take a piece of straight wire long enough to extend from the front end of the belly-opening to the tip of the tail; sharpen, if necessary, one end of it, and wind round it enough cotton-wool to fill out the skin of the tail; then brush it with arsenical soap, and push the pointed end down to the extreme tip of the tail-skin, and fit the near end into the belly, packing it round with the wool of the body. Put some wool into the empty skin of the arms and legs, winding it round the bones and connecting it with the wool of the body. Then stitch up the opening down the belly. Tie the label on to the right hind foot above the ankle.

5.—Lay the skin on a board or piece of cork, draw out the fore-paws forwards, and pin them down to the board by a pin passed boldly through the middle of the paw. Take care that they are pinned close in to the sides of the neck or head, in order to prevent their claws catching in other skins when all are packed together in boxes. Similarly, pin back, *soles downwards*, the hind feet by the sides of the tail. It is of considerable importance that neither fore nor hind feet should project laterally outwards, nor should curl up in drying, and that the fingers and toes should be kept close together and parallel, not spread out sideways.

6.—As the skin dries, try to get the face to assume as natural a shape as possible. The ears in foxes, hares, rats, and mice may be neatly folded backwards; in bats, squirrels, and other animals they should stand up in an erect position.

7.—Disarticulate the skull from the trunk, label it with *your initials* and the corresponding number to that on the skin, and then let it dry. In a dry climate this may be done almost without any cleaning; and even in a wet one, if the skull be dropped into some sawdust artificially



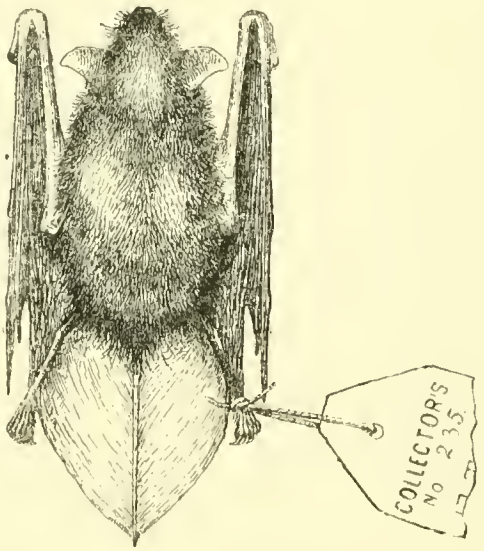
MODE OF TAKING MEASUREMENTS. (See p. 181.)

dried, little cleaning need be done; in any case the tongue should always be left in to protect the palate-bones. In a general way try to do as little to the skull as the climate will admit of—but, of course, it must not be allowed to become rotten. Drying naturally or artificially is the best, and arsenic or other chemicals should not be put on it, insects being kept off by the use of naphthaline or other disinfectant. Fly-blown skulls should not be dropped into the same box with other drying skulls, nor should fresh skulls be shut into tightly closed boxes. A convenient way to dry the skulls is to place them immediately they are taken out and labelled into a muslin bag with a little sawdust, and then to hang the bag in the air, sun, or before the fire, so as to dry them without exposing them to the attacks of blow-flies.

8.—Pack the skins up carefully in small boxes when they are dry, in layers, with enough wool between them to prevent their shaking about. Do not roll them up separately in paper.

It is a good plan to have with you an ordinary cork-lined insect-box, in which the pieces of cork can be pinned for travelling. When the skins are partly dry, they can be taken off the separate pieces of cork, and pinned close together in the box, where they can safely travel and dry at the same time.

9.—Bats should be skinned like other animals, but the limbs are separated at the shoulders and hip-joints instead of the elbows and knees.



They are also pinned down in the usual way, the pins running through the wrist-joint and the hind feet. The wings *should not be spread out*, but should be folded up on each side of the body in such a way as not to hide the fur of the belly. The thumbs should be made to point inwards or

backwards, not outwards. The hind legs may be spread sufficiently to stretch the membrane between them, and then their breadth taken as a guide for the breadth of the wings when folded. One or two specimens of each species should also, if possible, be preserved in spirit.

The skinning of larger animals must necessarily be somewhat different from the above; but the labelling and make-up of skins should be as described, except that when the combined lengths of body and tail exceed thirty-nine inches the tail should be bent round sideways on itself or along the side of the body.

WANTED, generally, all small Mammals, *however common—i.e.* Squirrels, Rats, Mice, Shrews, Moles, Bats, Weasels, Stoats, etc., etc. Domesticated animals are, however, not wanted, nor are rats or mice caught in houses in towns. Do not be afraid of sending too many of the same sort, if carefully prepared and labelled as above described. This direction, however, would necessarily be modified in the case of specimens collected *for sale.* Series of skins representing the different seasons are always of interest.

Such animals are to be obtained chiefly by setting traps in likely places, runs and mouse-holes being specially looked for. A stock of small metal traps should be taken out by the collector, who should also look out for effective native traps. Pitfall-traps, made out of glass or metal jars sunk in flush with the ground, are also very often successful.

British Museum (Natural History),
Cromwell Road, London, S.W.
November 30, 1905

APPENDIX III

NOTICE

The following Ordinance, made by His Majesty's Commissioner for the Somaliland Protectorate, is published for general information.

(Signed) H. A. BYATT,
Secretary to Administration.

BERBERA, *July 10th*, 1907.

SOMALILAND PROTECTORATE

AN ORDINANCE

Enacted by His Majesty's Commissioner for the Somaliland Protectorate.

(Signed) H. E. S. CORDEAUX,
His Majesty's Commissioner.

BERBERA, *June 12th*, 1907.

NO. 2 OF 1907

Game Preservation

1. In this Ordinance—

Definitions. "Hunt, kill, or capture" means hunting, killing, or capturing by any method, and includes every attempt to kill or capture.

"Hunting" includes molesting.

"Game" means any animal mentioned in any of the Schedules.

"Public officer" means a European officer in the public service of the Somaliland Protectorate, or an officer of one of His Majesty's ships visiting the coast.

"Native" means any native of Africa, not being of European or American race or parentage.

"Settler" means a person for the time being resident in the Protectorate, not being a public officer or a native.

"Sportsman" means a person who visits the Protectorate wholly or partly for sporting purposes, not being a public officer, settler, or native.

"District Officer" means the Administrative Officer in charge of a district of the Protectorate.

"Schedule" and "Schedules" refer to the Schedules annexed to this Ordinance.

General Provisions

2. No person, unless he is authorized by a special licence in that behalf, shall hunt, kill, or capture any of the animals mentioned in the First Schedule. First Schedule.

3. No person unless he is authorized by a special licence under this Ordinance, shall hunt, kill, or capture any animal of the kinds mentioned in the Second Schedule, if the animal be— Second Schedule.

(*a*) Immature; or

(*b*) A female accompanied by its young.

4. No person, unless he is authorized under this Ordinance, shall hunt, kill, or capture any animal mentioned in the Third Schedule. No shooting except under licence.

5. The Commissioner may, if he thinks fit, by Proclamation, declare that the name of any species, variety, or sex of animal, whether beast or bird, not mentioned in any Schedule hereto, shall be added to a particular Schedule, or that the name of any species or variety of animal mentioned or included in one Schedule shall be transferred to another Schedule, and, if he thinks fit, apply such declaration to the whole of the Protectorate, or restrict it to any district or districts in which he thinks it expedient that the animal should be protected. Power of Commissioner to alter Schedules.

6. No person shall within the Protectorate sell, or purchase, or offer, or expose for sale any ostrich eggs, or any head, horns, skin, or flesh of any animal mentioned in any of the Schedules, unless the ostrich or animal has been kept in a domesticated state; and no person shall knowingly store, pack, convey, or export any part of any animal which he has reason to believe has been killed or captured in contravention of this Ordinance. Sale of trophies prohibited.

7. If any person is found to be in possession of any elephant's tusk weighing less than 25 lb., or any ivory being, in the opinion of the Court, part of an elephant's tusk which would have weighed less than 25 lb., he shall be guilty of an offence against this Ordinance, and the tusk or ivory shall be forfeited unless he proves that the tusk or ivory was not obtained in breach of this Ordinance. Possession of immature ivory.

Power of Commissioner to prohibit certain methods of capture.

8. Where it appears to the Commissioner that any method used for killing or capturing animals is unduly destructive, he may, by Proclamation, prohibit such method, or prescribe the conditions under which any method may be used; and if any person uses any method so prohibited, or uses any method otherwise than according to the conditions so prescribed, he shall be liable to the same penalties as for a breach of this Ordinance.

Animal not scheduled may be killed without licence.

9. Save as provided by this Ordinance, or by any Proclamation under this Ordinance, any person may hunt, kill, or capture any animal not mentioned in any of the Schedules.

Game Reserves

Game reserves.

10. The areas described in the Fifth Schedule hereto are hereby declared to be game reserves.

Power of Commissioner to declare and alter reserves.

The Commissioner, with the approval of the Secretary of State, may, by Proclamation, declare any other portion of the Protectorate to be a game reserve, and may define or alter the limits of any game reserve, and this Ordinance shall apply to every such game reserve.

Save as provided in this Ordinance, or by any such Proclamation, any person who, unless he is authorized by a special licence, hunts, kills, or captures any animal whatever in a game reserve, or is found within a game reserve under circumstances showing that he was unlawfully in pursuit of any animal, shall be guilty of a breach of this Ordinance.

Close season.

11. There shall be an annual close-time for game in the Protectorate, from the 15th March to the 15th June, both days inclusive, during which, notwithstanding any authorization conferred on licence-holders under this Ordinance, no game animals mentioned in the four Schedules annexed to this Ordinance shall be hunted, killed, or captured.

Licences to Europeans, etc.

Licences.

12. The following licences may be granted by the Commissioner, or any District Officer or such person or persons as may be authorized by the Commissioner, that is to say:—

(1) A sportsman's licence;

(2) A public officer's licence; and

(3) A settler's licence.

Fees payable.

The following fees shall be payable for licences, that is to say, for a sportsman's licence, 500 rupees, and for a public officer's or a settler's licence, 100 rupees.

Duration of licence.

Every licence shall be in force for one year only from the date of issue.

Provided that a public officer's licence may be granted for a single

period of 14 consecutive days in one year on payment of a fee of 30 rupees.

Form of licence.

Every licence shall bear in full the name of the person to whom it is granted, the date of issue, the period of its duration, and the signature of the Commissioner, District Officer or other person authorized to grant licences.

Security may be required.

The applicant for a licence may be required to give security by bond or deposit, not exceeding 2,000 rupees, for his compliance with this Ordinance, and with the additional conditions (if any) contained in his licence.

Transfer of licence.

A licence is not transferable.

Production of licence.

Every licence must be produced when called for by any officer of the Protectorate Government.

Restrictions on granting a licence.

In granting licences under this Ordinance a District Officer or any person authorized to grant licences shall observe any general or particular instructions of the Commissioner.

Sportsman's and public officer's licences.

13. A sportsman's licence and a public officer's licence respectively authorize the holder to hunt, kill, or capture animals of any of the species mentioned in the Third Schedule, but unless the licence otherwise provides, not more than the number of each species fixed by the second column of that Schedule.

Additional animals under a licence.

The holder of a sportsman's or public officer's licence granted under this Ordinance may by the licence be authorized to kill or capture additional animals of any such species on payment of such additional fees as may be prescribed by the Commissioner.

Settler's licence.

14. A settler's licence authorizes the holder to hunt, kill, or capture animals of the species and to the number mentioned in the Fourth Schedule only.

To whom licences may be issued.

15. A public officer's licence shall not be granted except to a public officer, save that the Commissioner may issue a limited number of public officer's licences to military officers of the Aden Garrison. A settler's licence shall not be granted except to a settler, but a sportsman's licence may be granted to a settler.

Shooting may be allowed in reserves for specific reasons under special licence.

16. Where it appears proper to the Commissioner for scientific or administrative reasons, he may grant a special licence to any person, not being a native, to kill or capture animals of any one or more species mentioned in any of the Schedules, or to kill, hunt, or capture in a game reserve specified beasts or birds of prey, or other animals whose presence is detrimental to the purposes of the game reserve, or in particular cases, to kill or capture, as the case may be, in a game reserve, an animal or animals of any one or more species mentioned in the Schedules.

Conditions of special licence.

A special licence shall be subject to such conditions as to fees and security (if any), number, sex, and age of specimens, district and season for hunting and other matters as the Commissioner may prescribe.

Save as aforesaid, the holder of a special licence shall be subject to the general provisions of this Ordinance, and to the provisions relating to holders of licences.

Register of animals to be kept

17. Every licence-holder shall keep a register of the animals killed or captured by him in the form specified in the Seventh Schedule.

and submitted quarterly

The Register shall be submitted as often as convenient, but not less frequently than once in three months, to the nearest District Officer, who shall countersign the entries up to date.

and produced on demand

Any person authorized to grant licences may at any time call upon any licence-holder to produce his register for inspection.

and on leaving the Protectorate.

Every person holding a sportsman's licence shall likewise before leaving the Protectorate submit his register to the District Officer of the port from which he embarks.

Penalty for failure to keep register.

If any holder of a licence fails to keep his register truly he shall be guilty of an offence against this Ordinance.

Power of Commissioner to revoke licences

18. The Commissioner may revoke any licence when he is satisfied that the holder has been guilty of a breach of this Ordinance or of his licence, or has connived with any other person in any such breach, or that in any matters in relation thereto he has acted otherwise than in good faith.

and to refuse issue.

19. The Commissioner may at his discretion direct that a licence under this Ordinance shall be refused to any applicant.

If licence is lost another may be issued.

20. Any person whose licence has been lost or destroyed may obtain a fresh licence for the remainder of his term on payment of a fee not exceeding one-fifth of the fee paid for the licence so lost or destroyed.

Trespassing on private property.

21. No licence granted under this Ordinance shall entitle the holder to hunt, kill, or capture any animal, or to trespass upon private property without the consent of the owner or occupier.

Penalty for killing animals in excess of the number allowed.

22. Any person who, after having killed or captured animals to the number and of the species authorized by his licence, proceeds to hunt, kill, or capture any animals which he is not authorized to kill or capture, shall be guilty of a breach of this Ordinance, and punishable accordingly.

Servants of licensees.

23. Persons in the employment of holders of licences may, without licence, assist such holders of licences in hunting animals, but shall not use fire-arms.

Forfeiture of licence.

In any case of a breach of this Ordinance the licence of every licence-holder concerned in the breach shall be liable to forfeiture, and such licence-holder shall be guilty of an offence.

Power of Commissioner to require a licence to be taken out.

24. The Commissioner or any person authorized by him in that behalf may, at his discretion, require any person importing fire-arms or ammunition that may be used by such person for the purpose of killing game or other animals to take out a licence under this Ordinance, and may refuse to allow the fire-arms or ammunition to be taken from the public warehouse until such licence is taken out. Save, as aforesaid, nothing in this Ordinance shall affect the provisions of "The Somaliland Fire-arms Regulations, 1905."

Restrictions on Killing Game by Natives

Killing game by natives.

25. Except as regards the animals mentioned in Schedule I, and larger and lesser kudu, the killing of which by natives will be prohibited, the provisions of this Ordinance as to the killing of animals other than in the reserve will not for the present be applied to the inland tribes who have hitherto been accustomed to depend on the flesh of wild animals for their subsistence.

Legal Procedure

Power of a public officer to search on suspicion

26. Where any public officer of the Somaliland Protectorate thinks it expedient for the purpose of verifying the register of a licence-holder or suspects that any person has been guilty of a breach of this Ordinance, he may inspect and search, or authorize any subordinate Officer to inspect and search, any baggage, packages, waggons, tents, building, or caravan belonging to or under the control of such person or his agent; and if the Officer finds any heads, tusks, skins or other remains of animals appearing to have been killed, or any live animals appearing to have been captured, in contravention of this Ordinance, he shall seize and take the same before a Magistrate to be dealt with according to law.

Penalty for breach of Ordinance.

27. Any person who hunts, kills, or captures any animals in contravention of this Ordinance, or otherwise commits any breach of this Ordinance, shall, on conviction, be liable to a fine which may extend to 1,000 rupees, and, where the offence relates to more animals than two, to a fine in respect of each animal which may extend to 500 rupees, and in either case to imprisonment which may extend to two months, with or without a fine.

Forfeiture of trophies.

In all cases of conviction, any heads, horns, tusks, skins, or other remains of animals found in the possession of the offender or his agent, and all live animals captured in contravention of this Ordinance, shall be liable to forfeiture.

If the person convicted is the holder of a licence, his licence may be revoked by the Court.

Reward payable to informers.

28. Where in any proceeding under this Ordinance any fine is imposed, the Court may award any sum or sums not exceeding half the total fine to any informer or informers.

Repeal, etc.

Repeal clause.

29. All previous regulations as to the killing of game in the Protectorate are hereby repealed.

Form of licences.

30. The forms of licences appearing in the Schedule hereto, with such modifications as circumstances require, may be used.

Short title.

31. This Ordinance may be cited as "The Somaliland Game Preservation Ordinance 1907."

SCHEDULES*

First Schedule

ANIMALS not to be hunted, killed, or captured by any person except under special licence :

1. Zebra, all species.
2. Giraffe.
3. Eland.
4. Gnu.
5. Wild ass.
6. Buffalo.
7. Elephant.
8. Vultures.
9. Secretary birds.
10. Owls.
11. Ostrich, female and young.

Second Schedule

ANIMALS, the females of which are not to be hunted, killed, or captured when accompanied by their young, and the young of which are not to be captured except under special licence :

1. Rhinoceros.
2. All antelopes and gazelles.

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* These Schedules may contain the names of species or varieties not found, or only occasionally found in Somaliland.

Third Schedule

ANIMALS, limited numbers of which may be killed or captured under a Sportsman's or Public Officer's licence:

Species.	Number allowed under licence.
1. Rhinoceros	1
2. Antelopes and Gazelles :—	
(i) Oryx	3
(ii) Greater Kudu (*Strepsiceros*)	1
(iii) Lesser Kudu (*Imberbis*)	1
(iv) Swayne's Hartebeest	1
(v) Clarke's Gazelle	1
(vi) Klipspringer	2
(vii) Beira	2
(viii) Pelzeln's Gazelle	2
(ix) Waller's Gazelle	4
(x) Speke's Gazelle	10
(xi) Sœmmering's Gazelle	10
(xii) Dik-dik (of each species)	15
3. Cheetah	2
4. Aard-wolf	2
5. Smaller monkeys (of each species)	2
6. Ostrich, males	1
7. Marabous	2
8. Egrets	2
9. Greater Bustards	2
10. Wild Pig (of each species)	6
11. Smaller Cats	10

Fourth Schedule

ANIMALS, which may be killed under Settler's licence:

Species.	Number allowed under licence.
1. Speke's Gazelle	10
2. Soemmering's Gazelle	10
3. Waller's Gazelle	4
4. Dik-dik	15
5. Wild Pig (*of each species*)	6
6. Smaller Cats	10

Fifth Schedule

Game Reserves

1. The area bounded by a line running from Geloker Hill through Lower Sheikh and the Sheikh's tomb to Fodyer Bluff, thence West along the

KEY TO PLATE OF THE SOMALI ANTELOPES

1. Strepsiceros kudu.
2. Oryx beisa.
3. Strepsiceros imberbis.
4. „ „
5. Gazella pelzelni.
6. „ spekei.
7. Lithocranius walleri.
8. Bubalis swaynei.
9. Dorcatragus melanotis.
10. Oreotragus saltator.
11. Cobus defassa.
12. Damaliscus jimela.
13. Tragelaphus scriptus decula.
14. Gazella sœmmering.
15. Ammodorcas clarkei.
16. „ „

THE SOMALI ANTELOPES

crest of the Golis Range to Daras Bluff, thence South through Armaleh to Garbardir Hill, thence East through Deimoleh-yer Hill to Geloker Hill.

2. The area bounded by a line running from Lafarug through Mandeira and the Jerato Pass to Syk, Talawa-Yer and Hargeisa River to Haraf, thence to Sattawa at the intersection of the 10th parallel with 44 East meridian, and thence along the 10th parallel to its starting point at Lafarug.

Sixth Schedule

No. 1.—*Sportsman's Licence* (*Fee*, 500 *rupees*); *or Public Officer's Licence* (*Fee*, 100 *rupees*)

A.B., of , is hereby licensed to hunt, kill, or capture wild animals within the Somaliland Protectorate for one year from the date hereof subject to the provisions and restrictions of "The Somaliland Game Preservation Ordinance, 1907."

The said *A.B.* is authorized, subject to the same Ordinance, to kill or capture the following animals in addition to the number of the same species allowed by the Ordinance, that is to say :

Fee paid, rupees.
Dated this day of , 190 .

(Signed)
H.M. Commissioner (*or District Officer*).

No. 2.—*Settler's Game Licence* (*Fee*, 100 *rupees*)

C.D., of , is hereby licensed to hunt, kill, or capture wild animals within the district of the Somaliland Protectorate for one year from the date hereof, but subject to the provisions and restrictions of "The Somaliland Game Preservation Ordinance, 1907."

Dated this day of , 190 .

(Signed)
H.M. Commissioner (*or District Officer*).

Seventh Schedule

Game Register

Species.	Number.	Sex.	Locality.	Date.	Remarks.

I declare that the above is a true record of all animals killed by me in the Protectorate under the licence granted me on the
190 .

(Signed)

Passed , 190 .

(Signature of Examining Officer.)

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